

DECISIONS, DECISIONS: FACTORS THAT INFLUENCE STUDENT SELECTION
OF FINAL YEAR CLINICAL PLACEMENTS

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ABSTRACT

Clinical practice is an essential and integral component of nursing education. The decision-making process involved in student selection of clinical placements is influenced by a range of factors which are internal or external to students. As there was little research that explored these factors and the influence they have on student decisions, I wanted to investigate this further. A mixed-method approach was used, using a questionnaire and focus group interview, to give breadth and depth to the research. This study found that students are particularly influenced by previous positive experiences, or an interest in a particular area of practice. Their personality will also influence their placement decisions. Nurse preceptors and clinical lecturers also provide a key support role to students in the clinical environment.

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CHAPTER 1: INTRODUCTION

The Importance of Clinical Practice in Nursing Education

Within this dissertation I explore how Bachelor of Nursing students select final year clinical placements and examine the factors that influence their decision-making. My interest in this topic is particularly relevant to my clinical leadership role in the Bachelor of Nursing programme at a large tertiary education institution and I expect the findings to be useful for future planning of the clinical curriculum.

Clinical practice is an essential and integral component of nursing education. In the third and final year of the nursing programme at our institution students are able to have input into their clinical placement plans, and I am curious to know what influences the selections that students make. For example, are their choices learning-focused due to an interest in a particular area of nursing practice, or are they influenced by more practical issues such as the geographical location of the clinical placement or the possibility of future employment? I believe that actively involving students in their clinical placement selections will start them thinking more seriously about their future nursing careers. I also suspect that choosing clinical experiences that engage their interest may help them to develop a beginning specialty practice focus, as Shailer (1997) has previously found, or strengthen their knowledge and skills in an area of weakness or potential deficit. In addition, students who are interested in a particular clinical environment are more likely to be active learners, self-directed, and make the most of the available learning opportunities, views which are also supported by Peate and

Aristizabal (1995) and McDougall (1996). Social acceptance into the practice of nursing is also very important for students, and other nurses will have a major influence on student learning (Cope, Cuthbertson, & Stoddart, 2000; Hart & Rotem, 1994; Nolan, 1998).

Overall, engaging students in positive and specific clinical learning environments will increase their chances of finding a particular area of practice where they feel they belong, and want to work in the future. I am hopeful that this will increase the likelihood of them continuing nursing as a career, ideally in the Canterbury region or somewhere in New Zealand, which will assist with local and national, recruitment and retention issues. The current global shortage of nurses reinforces the importance for students to view nursing in New Zealand as a positive and rewarding career. Many nurses have traditionally, and will continue to travel overseas for their 'OE' ('Overseas Experience'), but if they have positive memories of their undergraduate nursing education in New Zealand, they are more likely to choose to return to work here in the future.

The clinical learning environment is the most influential factor in the development of nursing skills, knowledge and professional socialization according to Chun-Heung and French (1997), Calpin-Davies (2003), and Edwards, Smith, Courtney, Finlayson and Chapman (2004). Clare, Brown, Edwards and van Loon (2003) also supported this and in their review of the literature found that clinical placement environments play an important role in the competency, confidence, organisational skills and preparedness for practice of nursing students. Edwards et al. (2004) also found that these factors influenced students' satisfaction with their placement and overall positive

or negative feelings about these experiences, which in turn impact on students career intentions.

The educational and vocational needs of the new generation 'x and y' students also need consideration, particularly in relation to nursing as a career. Wieck (2003) cautions that young people will no longer be attracted to nursing because it is a caring profession. They will look beyond this to the opportunities and outcomes that a nursing career can provide, and will expect their nursing education to prepare them appropriately. As an emerging workforce, generation 'x and y' students are wanting their particular needs met, and looking for opportunities for success, while maintaining a work-life balance (Rognstad, Aasland, & Granum, 2004; Wieck, 2003).

The decision-making process used by nursing students in regard to clinical placements will be influenced by many different factors, but will still require the gathering of information, consideration of alternatives, and the implementation of a decision (Mihal, Sorce, & Comte, 1984). Apart from a range of specific factors within the clinical environment where nursing practice occurs, students' may also be influenced by their family and friends, the media, the place where they live, and by their own individual needs.

It is anticipated, therefore, that this research will provide some insight into the decision-making processes that students use when selecting final year clinical experiences, and the implications of these choices.

Description and Purpose of this Particular Study

The specific purpose of this two-phase, sequential mixed methods study is to identify the factors that influence the decision-making of students when selecting clinical placements in their final year. It will obtain descriptive quantitative results from a sample of final year students and then follow up with a small group interview to explore those results in more depth. In the first phase, a questionnaire will address the factors that influence nursing student decision-making for their clinical placements in their final year of study at a tertiary education institution. In the second phase, a small qualitative focus group interview will be used with another final year group of nursing students at the same educational institution, to explore some of the significant findings from the questionnaire,

Past studies have overlooked how students actually make decisions about their clinical placements when they are able to be involved in this process, and particularly the factors that influence this decision-making. This appears to be an under-researched topic in nursing education in New Zealand, and my study aims to fill this gap. It is anticipated that the research findings will be useful to nurse educators in relation to curriculum design, nurse clinicians in relation to the clinical environment, and nurse managers in relation to workforce planning.

The literature reviewed confirms that clinical learning environments have a profound influence on nursing students. If this is the case, what factors are students most influenced by in relation to clinical placement selection?

Overview of the Dissertation

This dissertation is presented in six chapters. This chapter (the introduction) describes the background and purpose of the study. I have outlined the importance of clinical practice experience in relation to nursing education, and the possible factors involved when students are asked to make decisions about clinical practice experiences in their final year of the nursing programme.

Chapter two, the literature review, will explore a range of factors that may influence student decision-making in relation to their clinical placements. These include the influence of the student's unique self, the influence of the clinical learning environment itself, and possible external influences on students' perceptions of nursing. The concept of 'location and place' in relation to nursing is also examined, as well as consideration of the impact of education and career planning.

Chapter three describes the methodology used in this study. A mixed method approach, using a questionnaire and follow-up focus group interview was used in order to give breadth and depth to my research question. A qualitative content analysis approach was taken with the text data in the questionnaire and the focus group transcript, and this was compared and contrasted with the quantitative data gathered from the questionnaire.

Chapter four outlines the findings of the initial questionnaire, and these are discussed in chapter five in relation to the focus group interview. In Chapter six I present my conclusions, as well as the implications for nursing education and practice.

CHAPTER 2: REVIEW OF THE LITERATURE

A large body of international literature on the factors that influence nursing students' decision-making when selecting clinical placements in their final year provides a basis for this study. This chapter will explain the search process in reviewing the literature and then examine the relevant research on this topic.

The Search Process

The following review was developed through a systematic search of nursing and general databases such as CINAHL, Proquest Nursing Journals, Health Source Nursing:Academic Edition and Academic Search Elite, for research conducted within the last 10 years related to clinical placement selection by nursing students. Several articles beyond this period were included because of their contribution to this topic. Key words used in the searches included combinations of the following: clinical placement, student placement, student attitudes, student experiences, learning environment, clinical education, decision-making and preceptorship. Other themes encountered when using these terms were about clinical placements in general, learning on clinical placements, support on clinical placements and mentorship. All of these factors could potentially contribute to student decision-making about clinical placements.

Overview of Clinical Education in Nursing

“Clinical experience is recognised as the core of nursing education”, according to Clare et al. (2002, p. 93). Providing nursing students with optimum clinical education is an ongoing challenge in the rapidly changing health care environment, and the quality and quantity of clinical experience is often debated by nurses in education and practice. Student involvement with clinical placement decisions varies across countries and institutions, but in New Zealand it is usual for students to be involved in this process, particularly in their final year (Nurse Educators in Tertiary Sector [NETS], personal communication, April 11, 2005). Numerous factors can influence their choice of final year placements, and these decisions and experiences may in turn impact on their future nursing careers.

A review of the literature revealed a considerable range of research related to nursing students and clinical practice, and the factors that make this a unique experience for each student. Two studies in particular looked at factors that influenced student decision-making; one focused on student decisions related to speciality areas of nursing practice, and the other focused on job choices for newly qualified nurses. In the United Kingdom (U.K), Pye and Whyte (1996) identified factors that influenced nursing students’ branch or specialty choice of practice for their final year of study. On the basis of their findings they proposed a model of possible influences which included: age, gender, learning styles, career prospects, placement experiences, influences of significant others, and knowledge and image of nursing. Another U.K. study by White (1999) looked at the impact of clinical learning experiences on career choices by nursing

students. White also developed a model to illustrate the factors influencing job choices for newly qualified nurses. While this focused on personal experiences and internally held images of nursing, White acknowledged that other factors like age, gender and personality may also need consideration. The premise of her model is that the decision to choose a particular job depends on whether the job matches an individual's preferences, expectations and images of the ideal, whilst also considering the impact of constraints like existing financial and family commitments.

Collectively the factors identified in the above studies helped to provide a framework for this review. It would appear that there are often multiple factors that are influential on individual student choices, which can be inter-related and often complex, creating a unique clinical learning experience for each student. For the purpose of this literature review they will be grouped and discussed under the headings below:

- the influence of self (including age, gender, personality and learning styles)
- the influence of the clinical learning environment
- external influences on students' perceptions about nursing
- the influence of location and place
- the influence of education and career planning.

The process of decision-making per se has also been considered. I have briefly looked at a range of decision-making theories and models, as well as how these apply to tertiary level students in particular, and to career decision-making in general.

Factors Influencing Student Decision-making Regarding Clinical Placements

The Influence of Self

Age, Gender and Work Experience

Age, gender and work history appear to have an impact on areas of preferred nursing practice. In the U.K. students are required to choose a branch or specialty focus after completing their initial foundation programme. Pye and Whyte (1996) found those who chose a mental health focus were more likely to be male, mature at age of entry to the programme, with a previous employment history. Conversely students who chose a physical health focus tended to be female, between 18 and 21 years of age on entry to the programme, with little or no employment experience.

Age and gender also appear to have an impact on career goals. In White's (1999) study, men tended to be older on entry to nursing programmes, had high aspirations, and experienced rapid promotion once qualified. However, recent studies have revealed that younger students and qualified nurses are more ambitious and interested in earning money than their older colleagues (Cobden-Grainge & Walker, 2002; Rognstad et al., 2004). "The twenty-something generation wants as much as possible as fast as possible...they see each job or educational opportunity as a stepping-stone to their next achievement" according to Tulgan (2000, in Wieck 2003, p. 152).

Oblinger (2003) also described the different profiles of tertiary students today. She said they may range from a 40 year old mother (a "Baby Boomer") who is studying

whilst juggling family responsibilities, to a 25 year old young adult looking for a career pathway (“generation X”), or be school leavers (“generation Y” or “millennial” students) embarking on tertiary study (Oblinger). Thus the education of nursing students requires careful consideration, in order to balance the life experiences and expectations of these different student groups.

Gender and Family Roles

Gender and family roles can complicate when and where students can work and may reduce their range of choices in clinical practice. Women, depending on their age and life stage, may have young children to consider, older family members to care for, constraints of a spouse or partner’s work situation, or personal, financial and health considerations. As a result many women will not be able to move outside their geographical location, and may find it difficult to work rostered or full-time shifts (White, 1999). These constraints may also apply to male students, depending on their personal circumstances. Cobden-Grainge and Walker (2002) also suggested that family and income responsibilities have an influence on career plans. In their New Zealand study of recently qualified nurses they found those aged 31-40 years required more flexible shifts or working hours and access to affordable child care in order to remain in nursing. Nursing students in this age group, or those who have young children, are also likely to be influenced by these factors when considering final year placements, and future career plans. Shindul-Rothchild (1995) argues that women’s work experiences are also significantly influenced by the stages in their life cycles and careers, and their personal development is influenced by the demands of work and family life. Oblinger

(2003) supports these findings as well, and notes that in the United States the trend is towards more students in higher education being women over the age of 25 years, many of whom are trying to combine work and study.

It would appear, therefore, that age, gender and family roles can all impact on the clinical placement experiences available to students, and may be influencing factors in their decisions related to areas of practice that interest them.

Individual Values

Individual student values can also influence decision-making. Rognstad et al.'s (2004) study highlighted what young students want from a career. They found they valued success, and wanted careers with higher salaries and opportunities for promotion. They were focused on personal development, often seeking jobs that gave them pleasure and positive feelings. This was reflected in their interest in working with babies, children, and those who were healthy, as opposed to the chronically ill or elderly. Also of note is that 70% of the 301 students in Rognstad et al.'s (2004) study perceived the nursing degree as being a basis for further education, specialization and broadening their career choices, again illustrating their quest for success. A comparative study by Dunn and Hansford (2000) of nursing and teaching students identified 'altruism' as a common theme in student perceptions of their field experiences. When the nursing students reflected on their clinical practice, they found they valued that they had been able to 'make a difference' for the patients and families they had worked with. Given this desire, it is likely that students will seek clinical placements that give them this satisfaction in

their work. Wieck's (2003) research project also looked at the values of the emerging workforce and related these to nursing education and nursing as a career. She found that the students had high self-esteem, wanted a relevant education and a lifestyle balance between work and fun. They also wanted to be led but not managed, and have input into decision-making that affected them. Given these characteristics, Wieck (2003) recommended that nursing education must find a way to help students reach these goals, otherwise they may seek alternative careers that do.

Financial Considerations

Financial considerations may also be foremost for students when choosing clinical placements due to their student status and minimal income. Clinical placements that require the student to travel away from their home are likely to incur additional costs for the student, unless they have family or friends in the area to stay with. Smith, Edwards, Courtney and Finlayson's (2001) study of factors influencing student nurses in their choice of a rural placement found that 31% of students considered financial and employment commitments to be influential in their choice of a placement site. Students may be financially disadvantaged if they select rural or remote nursing placements. Loss of income from part-time jobs, continuing their contributions to their home or family situations while absent, and managing the additional placement expenses incurred with travel, accommodation and food, could become a financial strain, according to Neill and Taylor (2002). These factors may be sufficient to deter students from selecting this type of clinical placement, thus missing valuable learning experiences and exposure to rural nursing practice. The provision of assistance with costs associated with the placement

and accommodation (Smith et al., 2001), or special rural grants and scholarships from universities or schools of nursing (Neill & Taylor, 2007) would increase the opportunities for these experiences for all students.

Student Personality

Student personality also appears to influence the choice of clinical placement and areas of practice seem to appeal to different personality types. Happell (1999) found that intensive and coronary care nurses had an ‘achievement orientation’ with a good knowledge base and clinical skills, but they seemed to place less emphasis on caring, empathy and holistic care, whereas mental health nursing was perceived as more autonomous and allowing scope for original ideas, suiting nurses who valued spending time with their clients (Ferguson & Hope 1999). Hafner and Proctor’s (1993) study also looked at the influence of personality and education on student nurse’s specialty choices and identified differences between ‘action-orientated’ and ‘procedural’ specialties. They found that ‘action-oriented’ specialties (e.g. emergency department, intensive care units) tend to have elements of drama, excitement and the unexpected in their nursing practice. Students who seek these experiences would be unlikely to choose community or psycho-geriatric placements, where these practice elements would be less likely to occur. Procedural specialties (e.g. acute medical and surgical wards) involve nursing more passive patients in high technology environments. Hafner and Proctor found these tended to attract more conservative students as they involved more traditional nursing practice. When they also assessed students on a psychological defence scale, they found

a significant relationship between psychological defence style and specialty choice. A high score, reflecting what they referred to as 'psychological mindedness', appeared to be a characteristic of students interested in psychiatric (or mental health) nursing.

Yonge (1997) also links personality style with type of work or clinical area. Using the Myers- Briggs Inventory, Yonge found that those with high extroversion scores would enjoy the stimulation of people and working with groups, and therefore would be suited to working in areas like the emergency department. However, if the emergency area happened to be quiet, these students would be frustrated. These findings support the earlier findings of Hafner and Proctor (1993) in relation to 'action orientated' specialties.

Student personality and attitude to learning also influence the success of clinical placements according to Dunn and Hansford (1997). They found that students who are assertive and have a desire to learn would make the most of learning opportunities. Even under adverse clinical conditions, students who are proactive and self-directed in their learning styles are better able to cope and develop strategies to meet their learning needs (Andrews, Brodie, Andrews, Wong, & Thomas, 2005; Dunn & Hansford, 1997).

Spouse (2001) agrees that the student's level of confidence in each placement and their emotional state will strongly influence their professional development.

Learning Styles

Learning styles vary between individuals. It is useful for students to know how they learn best so that they can use this information to make choices about the type of clinical placement that is likely to suit them. They will then be able to make the most of learning opportunities, as different styles will affect a student's interaction with their preceptor (nurse that is assigned to work with student), and with their clients (Yonge, 1997). Stutsky and Laschinger (1995) measured the changes in learning style before and after the student had been precepted in a senior practicum. They found there was a change in style as a result of the preceptorship experience, as the student was able to adapt to and became socialised into the clinical area. Students demonstrated significant improvement in their adaptive learning competencies, showing greater congruence between their personal skills and the task demands of the clinical environment.

In Stutsky and Laschinger's (1995) review of the literature Kolb (1984, in Stutsky and Laschinger) contended that people in the human service professions like nursing have concrete learning styles, and that specific careers attract people with certain styles of learning. However, while their study did not fully support the claim about concrete learning styles, they did find that the learning environments found in nursing are 'people orientated' and scientific, and that these findings were consistent with Kolb's ideas. Also supporting this relationship between personality and learning style, Yonge (1997) argued that if students had a better understanding of this, they would learn better, have less anxiety, manage unexpected events, and enjoy their placement more.

In summary, it would appear that individual student attributes like age, gender, personality, values, work experience, financial, family situations and learning styles are all possible factors that could influence student learning experiences, their decisions about clinical placements, and ultimately their career choices.

The Influence of the Clinical Learning Environment

The clinical learning environment includes the practice setting and those who work in it. It is the most influential factor in the development of confidence and competence in nursing skills, acquisition of knowledge, professional socialization, and preparing students for practice (Chun-Heung & French, 1997; Clare et al., 2003; Calpin-Davies, 2003; Edward et al., 2004). Edwards et al. also found that these factors influence students' satisfaction with their placement, contribute to their overall positive or negative feelings about these experiences, and therefore have a subsequent impact on students' career intentions.

Nursing Staff

The clinical environment is also a complex social and cognitive experience for students, and being accepted into the 'community of practice' is very important (Cope, Cuthbertson, & Stoddart, 2000). They also suggest that the concept of 'acceptance' can be separated into a 'social acceptance' of students into the work environment, as well as a 'professional acceptance', which relates more to clinical competence, and which has to be earned (Cope et al., 2000). Nurses in the clinical environment have a major influence

on student learning. Their attitudes towards students are a significant factor in the quality of the learning experience (Thornton & Chapman, 2000; Vallant & Neville, 2006). Student nurses want to fit into the social environment of the clinical setting and be accepted by staff and patients (Nolan, 1998), but the very nature of their supernumerary status and clinical rotations, makes it hard for them to legitimately belong to the nursing culture of each different clinical placement (Cope et al., 2000). These views support the findings of Hart and Rotem (1994), and Dunn and Hansford (1997), who found the most significant factor related to clinical learning was positive inter-relationships with staff. Hart and Rotem's (1994) work is often referred to in the literature related to clinical education. They interviewed 30 final year nursing students at a university in Australia, asking them to describe their best clinical learning experience. A common theme was the need to 'belong' in the clinical setting, as well as receiving recognition for their contribution to patient care.

Nursing students use the clinical environment to learn the role of the nurse, and are required to apply their knowledge to practice; " 'knowing how' and 'knowing that'" (Cope et al., 2000, p.850). Students may need to adjust their behaviour and assimilate knowledge and skills in order for them to be accepted by their nursing colleagues. Potential conflict can occur if there is a difference between how they want to practice and the reality of the practice environment (Spouse, 2000). Ashworth and Morrison (1989) also refer to the potential difficulties for students in deciding whether their role is to one of a learner, or one of a worker in the clinical environment. Students who are only short term members of a health organisation have the dilemma of deciding

whether to become acculturated during their placement period, to 'fit' into the organisation, or not.

A supportive and nurturing environment is the foundation for clinical learning (McAllister, 2001; Thornton et al., 2000) and is where optimum student performance can be expected (Penman & Oliver, 2004). All staff are responsible for creating and maintaining a good learning environment, but the nurse in charge has a dominant and important influence (O'Flanagan, 2002). The management style, philosophy and expectations of the nurse-in-charge are very important in creating a ward culture that values education. Clinical nurses who are approachable and who have good interpersonal skills will create an environment where students feel safe and are able to make the most of learning opportunities (Andrews et al., 2005; Chan, 2002). Clinical teaching and support in the form of preceptorship or mentorship is also important to help students to adapt to the real world of nursing. Several authors suggest that nurses who perform these roles play a significant part in helping students learn the culture of the workplace, and fit into the work environment so that learning can take place (Andrews et al., 2005; Papp, Markkanen, & von Bonsdorff, 2003; Stutksy & Laschinger, 1995).

Choice of Clinical Placement

The type of clinical placement itself also appears to have a significant effect on students' clinical learning and their perceptions of nursing. Nursing students are expected to have a range of practice experiences in order to meet the clinical competencies required by their statutory body. In their final year many nursing programmes offer students a 'transition to practice' or final 'elective' placement, to

consolidate their knowledge and skills and prepare them for the registered nurse scope of practice. Nursing students in New Zealand ‘elect’ this final clinical placement by a selection process determined by their School of Nursing (NETS, personal communication, April 11, 2005). The philosophy underpinning elective placements, according to Peate and Aristizabal (1995, p.246), is “that students usually know what they want to learn and are best placed to discriminate from what is on offer in the light of their ultimate career objectives.” They believe that elective experiences develop student confidence, encourage students to be self-directed in their learning, and motivated to achieve learning outcomes. McDougall (1996) also supports the ‘elective’ experience, and student choice in education. He states that nurses are expected “to make decisions, solve problems and act autonomously” (p.1203), so giving students the opportunity to have control over the decision of their final placement is allowing them to experience this for themselves and be active learners.

Cloutier, Shandro and Hyrack’s (2004) study also supported these views, and found that final year students liked to ‘drive’ or choose their placements in relation to areas of interest. However, students can worry about their decision-making as is evidenced in one student’s questions; “Will I get to work in an area I’m interested in? Will I come away with any marketable skills? ... Where do I want to go and why do I want to go there?” (Cloutier et al., 2004, p.12). According to Cloutier et al. (2004), these questions and concerns provide an opportunity for academic staff to work collaboratively with students to help them meet their clinical learning needs.

Student choices may also be influenced by an interest in a specialty area of practice, the desire to experience a different environment or culture, or to develop

expertise which could be explored further as a special topic (Shailer, 1997). Elective experiences frequently result in students wanting to pursue particular areas of practice following graduation. Lack of exposure to certain areas can have the opposite effect and has been an ongoing concern for some of the less popular practice areas like mental health, intellectual disability, aged care and rural nursing (Edwards et al., 2002; Happell, 2002; Neill and Taylor, 2002; Smith et al. 2001).

Numerous studies have highlighted the significant effect of mental health experiences on student preferences about where and how they want to practice (Ferguson & Hope, 1999; Hafner & Proctor, 1993; Hayman-White, Miller, & Happell, 2004; Mullen & Murray, 2002). Hardyman and Robinson's (2001) longitudinal study found that the clinical placement experience was the biggest influencing factor for decisions relating to working with mental health clients or those with learning disabilities. Hayman-White et al. (2004) also found that students who had positive experiences during their clinical placements were more likely to want to pursue a career in mental health.

In the area of aged care, positive experiences in both institutional and community settings in conjunction with additional gerontology theory teaching were important factors for senior students to consider this area of practice as a career (Abbey, Abbey, Bridges, Elder, Lemcke, et al. 2006; Fox & Wold 1996). Good role models, a genuine interest in older people and more exposure to older people in a variety of settings were other important influences, according to Earthy (1993, in Fox & Wold 1996).

Rural and remote nursing experiences for students were also important for the future recruitment of staff but adequate financial support during these placements was

found to be necessary (Neill & Taylor, 2002). In addition, students were more likely to select rural placements when they felt confident, competent, and organized about their clinical practice (Edwards et al., 2004).

The literature reviewed suggests that the clinical learning environment and the nurses who work in it have a profound influence on the student's learning experience and contains numerous factors that may influence their decisions about clinical placements, and, potentially, their future careers.

External Influences on Students Perceptions of Nursing

Images of Nursing

Nursing has traditionally been viewed as a female or feminine occupation with stereotypical images of nurses as doctors' 'handmaidens' with little independent professional and academic knowledge. The invisibility of specialised knowledge and skills involved in nursing practice has contributed to the perceived lack of status for nursing as a profession according to Brodie et al. (2004). Pye and White (1996) found the most significant factor in their study for students changing or reinforcing their specialty choice was the knowledge and image of nursing that students experienced during clinical placements. Spouse (2000) suggested that students should be encouraged to recognise and verbalise their ideal images of nursing practice and consider how they could be used in their professional work. She also found that when students encountered

personal or academic problems, external factors like preconceptions of nursing had a major influence on their decision to continue with the programme or not.

Student exposure to a variety of clinical placements provides the opportunity for them to experience different areas of practice, and observe the role of the nurse with a range of different client groups.

What Students Understand about Nursing

Students usually enter nursing with preconceived ideas about nursing. According to Happell (1999), the impact of society's views of nursing should also be considered. Her large study of beginning nursing students revealed that the career preferences of undergraduate nursing students were strongly influenced by the prevailing values of wider society. She found that students were influenced by the use of technology in nursing, and also favoured clinical areas where they were able to work with children (Happell, 1999). Students' preference for working with those at the beginning of the lifespan relates to society's perception that this work is more fulfilling and rewarding (Happell 2002, Rognstad et al., 2004). Rognstad et al. (2004) also found that students preferred careers working with healthy people as public health visitors or midwives, which they believed was influenced by the value of health and well-being in wider society, as opposed to working with people who were chronically ill, or elderly. Concerns about the potential impact of society's view of nursing were also raised by Brodie et al. (2004). Their large Canadian study with 650 students identified the perceptions of nursing that students have on entry to their education programme, and

how these are changed or confirmed as a result of their experiences. While the students' initially perceived nursing to be a career requiring high-level knowledge, skills, and responsibilities, these views changed after exposure to clinical practice to one of nursing being an underpaid, overworked profession with low morale. These negative attributes were the commonly held view of society at the time, according to Brodie et al.(2004).

Impact of the Media

The media may also influence decisions about nursing as a career, as well as particular areas of nursing practice. Brodie et al.'s (2004) research supported media initiatives to raise the profile of nursing in order to influence public opinion, and improve the future recruitment and retention of nurses. However, an earlier study by Ditommaso (2003) of the most influential recruitment activities for nursing revealed that students were only moderately influenced by newspaper articles. He noted that media reports about poor working conditions may have discouraged some potential students, but overall the students in his study still had a positive view of nursing. Ditommaso also acknowledged the influence that television programmes may have, which often present a positive image of nurses at work.

It would appear that the type of media that students obtain their information from may also be significant. I suspect that it is likely that students today access the internet more often than they read a newspaper, enjoy television as a means of information and entertainment, and rely on mobile telecommunications to organise their daily lives.

Preconceptions

A study to evaluate the impact of clinical learning experiences during a nursing course on immediate career choice was conducted by White (1999). She found that students appeared to use preconceived images and expectations about nursing to help with decision-making for nursing positions once qualified. These preconceptions remained unless they had clinical experiences during their course that changed them. White developed a model to illustrate the factors influencing job choices for newly qualified nurses. The model focused only on internally held images and personal experiences, but she acknowledged that wider factors like personality, age, gender, political and religious influences may also need consideration. Her model was based on the principle that each person is an individual, with a unique view of the world, and will develop this view through personal experience. She believed that students making career decisions should have the opportunity to experience these areas of practice during their education programme, rather than rely on how television or the printed media portray different specialties or client groups.

Student clinical placement experiences therefore play an important role in countering some of these views, and provide the opportunity to positively promote different areas of practice.

The Influence of Location and Place

Location of Clinical Placement

Shailer (1997) described how a university in the U.K. managed and planned elective experiences that allowed students to choose the specialty and location. Students in their programme could have one clinical elective in the U.K. and the other could have a world-wide scope. Students reported positively on the learning opportunities that these 'overseas' electives provided. Experiencing nursing in different locations, cultures and health care systems enabled students to learn about the roles of nurses and the delivery of health care in other parts of the world (Shailer). Only a minority of nursing students in New Zealand will have the opportunity to have an overseas elective experience primarily due to the financial barriers. However, many will have experiences away from their home base, which will still provide valuable exposure to different communities and their health care needs.

The Geography of Nursing

Of further interest in relation to location, is the concept of the 'geography of nursing'. Andrews (2003, p.231) defines this as "the dynamic between nursing, space and place". Liaschenko (1994, in Andrews 2003) suggests that the geographies of illness and disease are changing, as patients are increasingly cared for away from traditional institutional settings. In New Zealand this is currently evidenced by the expansion of community nursing services and the increasing complexity of care that clients of these

services require. Nursing research in the mid 1990's broadened the concept of geographical research to include the social and cultural construction of places, and in particular how the character of places impacts on health care, and how health care impacts on places (Andrews, 2002). Extending this concept again to the context of clinical placements, Andrews et al. (2005, p. 144) suggest that:

The influences of staff nurses, other health care workers, and the policies and procedures of both educational and healthcare institutions, potentially combine to provide multidimensional experiences of places in the form of clinical placements (i.e., nurses' impacts on places) which, in turn, impact upon nursing students (i.e., the effects of place on nurses). Ultimately, they may impact on their early career preferences and choices and, more broadly, on local nursing labour markets (again, nurses' impacts on places).

The relationship between nursing and place cannot be underestimated. Nursing students gain valuable 'market knowledge' in their clinical experience of different health care settings, and can use this to make informed choices when looking for employment. Andrews et al's (2005) study of attractiveness of healthcare settings, found that busy and stressful work environments with a high turnover of staff, had a negative impact on students and their first place of employment in particular. In addition, they found there was a statistically significant relationship between the students' learning experience at a ward level and that of the hospital as an attractive place of employment.

Areas of Nursing Practice

Further examples of the effect of nursing and place on each other, relate to specific areas of nursing practice. Recent studies previously mentioned have supported the importance of rural nursing placements to expose students to this area of practice, and to encourage them back to those areas when they are looking at future careers (Edwards et al., 2004; Neill and Taylor, 2002; Smith et al., 2001). Similarly, research into mental health career pathways has revealed the importance of providing quality clinical placements and positive learning experiences for nursing students (Ferguson & Hope, 1999; Hardyman & Robinson, 2001; Hayman-White, 2004; Hayman-White et al., 2004; Mullen & Murray, 2002). Interestingly, Stevens and Dulhunty (1997) do not agree with these views, as they found that it was a pre-existing interest in mental health that encouraged new graduates in this direction, rather than any effect from their nursing education. Nevertheless, the influence of individual ward environments on student experiences and career intentions is well supported by many researchers, including Calpin-Davies (2003), Chung-Heung and French (1997), Clare et al. (2003), and Talbot and Ward (2000, in Edwards et al. 2004), and also reinforce White's (1999) findings about personal experience.

Happell (2002) also signaled the predicted trend towards, and expansion of, community nursing. It is likely that people will spend less time in hospitals and more time being cared for in the community. Community care will become more acute and nurses will need to have transferable knowledge and skills to provide this. This reinforces the work of Liaschenko (1994, in Andrews 2003), and Andrews (2002), and Andrews et al. (2005) in relation to the geography of nursing. Nurses in both education

and practice have a role in promoting the value of all areas of nursing practice and the diversity of possible careers available to students, according to Happell (2002).

The concept of ‘place’ as described above, and its relationship to nursing practice, is another factor for students to consider when they select clinical placements. As Andrews (2003, p. 243) states, “nursing affects the experience of place, and in turn, place affects the experience of nursing.”

The Influence of Education and Career Planning

Technology in Nursing and Education

According to Happell (2002), nursing education appears to have little influence on student’s attitudes to choosing careers in specific areas of nursing practice. In their large Australian study of approximately 800 students, Happell found that students actually entered the programme with strong views about particular areas, and that the most popular practice areas were those involving technology. Medical and surgical nursing, which involve the use of medical equipment and procedures, were perceived to be ‘real’ nursing, supporting earlier findings by Kiger (1993), Stevens and Crouch (1995), and Stevens and Dulhunty (1997). As previously mentioned, Rognstad et al. (2004) also found that students preferred careers in more technical areas rather than working with the elderly or chronically ill. Earlier researchers like Johnstone (1994, in Happell (2002), and Millen (1989, in Happell) have argued that the use of technology in nursing brings nurses closer to medicine and the concept of ‘cure’ not ‘care’. They

suggest if curing is valued more highly, then practice in more highly technical areas will also be valued more. Happell stated that this may explain why areas like acute and critical care are more popular with beginning nurses, rather than areas like aged care, psychiatric nursing and community nursing. Her study found that clinical placements in these less popular areas made little difference to students' preferences at the end of their programme. She raised concerns at the differing values placed on different areas of practice, and how the manipulation of technology appears to be more important than the concept of care, which traditionally has underpinned nursing practice.

Oblinger (2003) also highlights the importance of technology in education generally. She suggests that students today view technology as a natural part of the environment. "The younger the age group, the higher is the percentage who use the Internet for school, work and leisure", says Oblinger (2003, p.38). She suggests that the attitudes and aptitudes of those who have grown up with technology are different from those who have not, and educators must be mindful of the learning needs of different generations of students.

Is Caring Enough?

Young people will no longer be attracted to nursing because it is a caring profession, cautions Wieck (2003). She conducted a research project in the United States that started as a descriptive study of the leadership needs of the emerging workforce. The project arose from a concern about the dwindling numbers of nurses who belonged to professional nursing organisations and evolved into research to determine the qualities

younger people wanted in their leaders, educators and managers. Wieck surveyed two generations: the entrenched workforce comprising existing nursing faculty and the emerging workforce (generation 'x', and 'y or millennial' students) who were represented by nursing students from different programmes. Her findings identified the differences between the emerging and entrenched workforces, what the emerging workforce wanted in a faculty, and the implications for nursing. The most desired traits that existing faculty believed students wanted in their teachers were clinical competence, being approachable, having a sense of humour, being receptive to people and ideas, being an advocate, and having a mentoring attitude. Having an understanding and caring manner, being a good communicator, and having a positive outlook were also thought to be important. Of interest is that the students surveyed did not consider competence, advocacy, or a caring or positive manner, to be important.

One explanation for this offered by Wieck (2003) is that rather than focusing on long-term competence, the emerging workforce were more interested in "What can you do for me now?" (Wieck, p.155). She also suggested that young people appeared to be empowered enough to advocate for themselves and do not want a caring dependent relationship with their educators (or managers). However, they do want feedback on how they are doing. Students also ranked the traits of being supportive and being able to motivate others, which the faculty staff did not mention. Wieck suggested that while students do not want external direction, they do seek assistance with developing internal motivation. The students also listed the traits of being professional and dedicated as important. Wieck commented that this may reflect the students' desire for faculty staff to get to know them, but also questioned whether the students in this survey were able to

discriminate between the semantics of words like ‘competence’ and ‘professional’. She concluded that the implications for nursing are that its image must be expanded from that of a caring profession, to include the potential rewards and opportunities for success. Rognstad et al. (2004) agrees with Wieck about young people desiring work that is outcome driven rather than process oriented.

The Clinical Elective

There appears to be an important link between the elective placements chosen in a student’s final year and their career path (Druck, 1981 in Peate and Aristizabal, 1995; Clare et al., 2002; Peate & Aristizabal, 1995). The elective placement requires students to think seriously about their personal and career goals (McDougall, 1996). A recent Australian study related to rural practice experiences revealed that “students use placements to move them along a continuum of choice from increasing awareness (‘open my mind’) to active intention (‘make up my mind’) (Playford, Larson, & Wheatland, 2006). Playford et al. found a strong association between voluntary placements and future rural practice, which reinforces the importance of educational institutions providing choice for students. Another small U.K. study by Shailer (1997) also reinforced the importance of specialty choice and location of placements. Students believed their employment prospects would be enhanced if they chose clinical placements in specialities which matched their future career aspirations, and that the elective experience was useful to add to their curriculum vitae and provided a topic for discussion at interviews (Shailer, 1997). Pye and Whyte (1996) in another U.K study

found that future career options were an influencing factor for students in choosing adult nursing as a particular branch or specialty area of nursing. Adult physical health nursing, as opposed to mental health nursing, was perceived to offer greater opportunities and career prospects with the ability to specialise, and travel overseas (Pye & Whyte, 1996).

Graduate Expectations and Beyond

Expectations of, and preparedness for the graduate role, are very real concerns for nursing students. Helsop, McIntyre and Ives (2001) in their Australian study of third year students, found that they favoured large public hospitals with good graduate programmes which would provide guidance and support. They were selective about the facility that would assist in launching their nursing career and favoured areas that were receptive to students. The most popular clinical areas were critical care, medical, surgical, paediatric and emergency, as per Happell's (1999, 2002) findings. Significant factors that influenced their preferences for a specific graduate programme were locality, reputation, rotations to preferred clinical areas and familiarity, according to Helsop et al (2001). However Cobden-Grainge and Walker (2002) in their NZ study of nurses career plans, found that 54% of new graduates had not worked in the specialty area as a student. Their decisions to take their first jobs related to wanting to work in a particular setting (e.g. hospital or community), in the areas they were living, and being able to work where they could consolidate their training.

Life cycles also influence career pathways in nursing, according to Shindul-Rothchild (1995). Their study looked at women's work experiences and in particular

factors associated with retention in nursing. They found that those in their early career stages were strongly influenced by the concept of idealism. These beginning nurses wanted to uphold standards of practice, be recognized and rewarded for quality care, and be supported, in order to maintain their commitment to nursing.

Establishing nursing careers are the goal of nursing education. Students need to consider what they want in a nursing career, and what they need to do to achieve this. The selection of final year placements is likely to have a significant effect on this process.

The Process of Decision-Making

Whilst this review has concentrated on the factors that influence nursing students in their selection of clinical placements, the concept of decision-making itself should also be discussed, particularly as it relates to students at the tertiary level and to career development.

Decision-Making Theory and Careers

The process of decision-making, according to Santrock (2005, p.365), “involves evaluating alternatives and making choices among them”, and requires judgement and reasoning skills. Nearly 100 years ago, Parsons (1909, cited in Phillips, 1997, p. 276) described ‘true reasoning’ as:

The basis for choice: a choice is rational...if the process is one in which the decider carefully gathers information about the self and the array of alternatives that is accurate and thorough...and the chosen alternative is one that matches the individual’s own unique characteristics and priorities.

Teideman and O’Hara (1963, cited in Phillips, 1997) and Harren (1979, cited in Phillips, 1997) adapted this original concept of decision theory to career decision-making, identifying the process for an individual from awareness and exploration, to identification of alternatives, choice and action. Other perspectives on how decisions are made are identified in the works of Gelatt (1962, in Phillips, 1997), who described specific tasks of the decision-making process, like estimating likely outcomes and weighting their value, and Pitz and Harren (1980, in Phillips, 1997), who detailed the

expected utility model of decision-making that combined preferred outcomes with the probability of these occurring.

Phillips (1997) describes these perspectives as rational approaches to decision-making, but also suggests that there are alternative models worth considering that give greater consideration to the context of an individual's life-span and life-space. It seems that some decision-making experts have argued that the traditional rational approach is an unmanageable process, and as a result many deciders will look for other easier ways to process relevant information, and may use 'shortcuts' to help with their decision-making (Phillips, 1997).

Psychology texts discuss different approaches to decision-making like the 'additive strategy', where each alternative is rated and the highest overall is chosen, or the 'elimination by aspects' strategy, where alternatives are eliminated if they do not satisfy the predetermined criteria (Wood, Wood & Boyd, 2005). They also describe potential biases and factors that may affect the quality of the decision, like heuristics (rules of thumb derived from experience), the 'framing' effect (the context or the way information is presented) and the tendency for over-confidence in our decisions and judgements (Rathus, 1999). In addition Santrock (2005) identifies the potential for 'confirmation bias' (the tendency to look for information that supports our ideas) and 'belief perseverance' (the tendency to hold on to a belief despite contradictory evidence). In her review of alternative models of decision-making Phillips (1997, p. 282) concluded, that "real-life decisions are not rational, at least in the classical sense of the term". She suggested (p.282) that "it seems to be beyond human capacity and inclination" to use classical rational approaches in real, rather than abstract situations. Phillips contends

that deciders appear to use many different strategies, are not comprehensive in their choices or selective about the information they use, and will make decisions that are sensible and “good enough”. Phillips suggests that career development in particular, suits a more adaptable, flexible approach that can contend with more complex, uncertain life-span and life-space contexts. Amundson’s (1995) model of career decision-making also supports this view, highlighting the importance of the interaction between contextual factors, decision triggers, and how decisions are framed and implemented.

Mihal, Sorce and Compte (1984) provide a useful summary of the different models of decision-making behaviour by identifying two main components that appear to be necessary when a choice is required. These are firstly how information is integrated, and secondly, the use of a ‘decision rule’. They describe the use of either a compensatory model of decision-making, which optimises a decision rule by selecting an alternative with the highest overall rating, or the use of a non-compensatory model, which selects a satisfactory alternative by using some of the strategies described above.

Thus rational and alternate decision-making theories provide a basis for us to understand how decisions are made, both in general life situations and in careers in particular. As careers in nursing begin with education in a tertiary environment, it is also useful to consider student decision-making at this level, and a brief review of this from a New Zealand perspective follows.

Decision Making by Tertiary Students

A report to the Ministry of Education of the New Zealand Government by Leach and Zepke (2005) on student decision-making by prospective tertiary students reviewed existing literature in New Zealand and overseas using the following four themes as a framework.

The first theme relates to the process of making decisions. The decision-making model used by Leach and Zepke (2005) was developed by Hossler and Gallagher (1987, in Leach & Zepke) and involved three stages: predisposition, search and choice. The first predisposition stage included consideration of family background and degree of self-belief. The next search stage included consideration of an interest in a particular field of study, access to information and possible future careers. The third stage is when choices are made and is influenced by what is available, and the positives and negatives of this decision.

The second theme related to factors that inform the decision-making process and included socio-economic status, academic achievement, subject area interest, and information on cost and financial support. Information that supports decision-making was the third theme, which could be obtained through interpersonal relationships and information sharing between students.

The fourth and final theme was recognition of diversity. The decision-making process was recognised as being even more complex for ‘non-traditional’ students. The impact of socio-economic class and membership of ‘at risk’ groups both have major

influences on decision-making. Age and cultural differences have some influence, but gender appears to have little effect (Leach & Zepke, 2005).

Whilst Leach and Zepke's (2005) report has been written from the perspective of decision-making by prospective tertiary students, the dynamics of the decision-making process and the factors that influence student choice within tertiary education are relevant to this study. As the majority of nursing students are recent school leavers, it is likely that they will continue to use a process similar to the model used by Leach and Zepke, to make decisions within the nursing programme. It is also likely that they will be affected by similar factors, require information to help make their decisions, and many students will come from diverse backgrounds.

Conclusion

The decision-making process involved in the selection of clinical placements is not a straightforward process for nursing students. Given the potential impact of these decisions on their future careers, it is important that they consider the range of possibilities, and advantages and disadvantages of each. Students need to recognise the uniqueness of their personal self, and consider the impact of their age, work history, and personal values on their decisions. Their personal financial and family situation also requires consideration, as these may preclude them from having clinical experiences away from home. In addition they should think about their personality type and

preferred learning style, and how well these would be suited to the clinical environment they are considering.

The experiences they have already had in the clinical environment will also influence their decisions. The memories they have of the nursing staff they have worked with, or observed in different practice areas will have a positive or negative influence on the student. Staff who have provided a supportive clinical learning environment will have favorably influenced the student's view of that particular area of practice. The reverse, of course, is also likely. The type of clinical placement and the nature of the nursing practice will also make a difference. Students will frequently seek clinical experiences that suit their personality, either returning to areas that are known, or seek the challenge and excitement of exploring the unfamiliar.

Other external influences will impact on students. They are likely to have preconceived images of what they expect nursing to be, and these may still have quite a powerful effect. Their increasing knowledge and experience of nursing practice may not be enough to change these enduring images. Societal views may also have an impact, from the comments of friends and family, to those seen and heard in the media.

The location of their clinical placements will also have a significant influence on the decision for many students. As already mentioned, financial and family considerations may make placements away from home impossible. Even those experiences that require travel across the city where they live may create too many difficulties for some students. The location of services providing health care could also influence student choice. Some students are strongly drawn to working in a hospital environment, while others may be deterred by this, preferring instead to work from a

community base or from a person's home. Again, specific practice placements may attract or repel students depending on their previous experiences, their preferred area of practice or other student feedback.

The nursing programme itself will also have an affect on student decision-making. The philosophy underpinning the curriculum, the teaching methodology, and the personalities and influence of the academic and clinical lecturers will have an influence on students, depending on the students' ages and life stages. Some will be younger students in the 'generation x and y' categories who will be seeking an education that will provide a successful career. The more mature students, who are often re-educating themselves into a second career, may have quite different goals (e.g. to meet a vocational calling). The type of placements experienced towards the end of the nursing programme are also likely to have a significant influence on where students will work as new graduates. Many students will be hoping to be accepted into new graduate programmes and will therefore be looking for placements in areas that will help them achieve this. Others will be seeking placements that offer working hours that suit family life or their personal circumstances.

Overall a range of factors could influence the decision-making process for nursing students about clinical placements. Each student will have a unique combination of these, which they will need to consider when selecting final year placements in particular. We can relate these factors to the decision-making model suggested for tertiary students. Students all start with a unique predisposition, from which they will begin their search, and then will make some choices. These choices could be influenced by any combination of factors previously mentioned, often by information gained at a

personal level, and for some, by the additional impact of factors related to diversity. Students are likely to use a combination of rational and alternate strategies in their process of decision-making, and are also likely to be influenced by potential biases, shortcuts, and the influence of significant others.

This review of the literature has discussed a range of possible influences, from those that came from the student's internal self, like personality, learning styles and career aspirations, to those that impact on the student externally, like the clinical learning environment. These findings provide a rich basis for this study from which to explore the factors that influence some New Zealand student's decision-making in relation to their final clinical placements.

CHAPTER 3: METHODOLOGY AND METHOD

Introduction

This chapter describes the methodology chosen for this two-phase study, the methods of data collection and the process of data analysis. A description of the participants is given and the ethical considerations are discussed. It begins by discussing the advantages and disadvantages of different research approaches and the assumptions that underpin these. Justification is then given for the decision to use a mixed methods approach for this particular study. A predominantly quantitative approach was used initially, in order to survey a specific sample of students and identify the factors that influenced their decision-making about their final year clinical placements. The questionnaire contained both rating and ranking scales, and open-ended questions. This was followed by a qualitative approach using a focus group interview to confirm and elaborate on the findings in the questionnaire. The chapter concludes with a brief discussion on the limitations of the methods used, and describes the unexpected factors that arose during the study.

Methodology

In seeking a research design appropriate to nursing inquiry, I considered the differences between quantitative, qualitative or mixed methods approaches, to decide which would best suit the aims of this study.

Different Methodological Approaches

The Quantitative Approach

The quantitative approach to research is traditionally based on post-positive assumptions about what constitutes knowledge. Post-positivism recognises that we cannot be 'positive' about our claims on knowledge when studying the behaviour and actions of humans, but we can examine the causes of problems that determine certain effects or influence particular outcomes (Cresswell, 2003). Quantitative methods generate 'hard' data and facts, using deductive logic, aiming to prove or disprove a particular theory (Couchman & Dawson 1990, cited in Begley, 1996). The researcher gathers this data in a systematic, objective and measurable way, usually in a numerical format, using instruments or tools, which are designed to measure the situation or relationship between the variables being studied. The data collected is then rigorously analysed to obtain specific findings and conclusions (Begley, 1996; Cresswell, 2003). Quantitative methodology had been the predominant approach to nursing research since the 1950's (Shih, 1998), until the emergence of qualitative research in the 1980's (Cresswell, 2003).

Advantages

An advantage of using a quantitative approach is that it provides breadth to the data collected, by using large sample groups from which the researcher can generalise the findings. It is also resource efficient in that it can usually be completed in a short

time frame by a small number of researchers (Davidson & Tolich, 2003). Cresswell (2003) also suggests that a quantitative method like a questionnaire is the best approach for a social research problem requiring the identification of factors or variables that influence an outcome, or for understanding the best predictors of an outcome. With a questionnaire, the researcher can identify the type of information to be collected in advance, and design the most appropriate tools to collect this data (Cresswell, 2003).

Disadvantages

The disadvantage of this approach is that while it enables a researcher to sample a broad range of participants about a particular topic, it does not provide depth to the data gathered. This is because the data collection tool will only collect the data it was designed for, and will not be sufficiently flexible to explore particular responses more fully. Once the research design has been set, it is hard to alter the research focus. The language skills of participants should also be considered if a questionnaire is used, to ensure that they are able to follow the instructions correctly (Davidson & Tolich, 2003). Low response rates are another potential problem with questionnaires (Bartley, 2003, cited in Davidson & Tolich), and participant goodwill is needed, so that they are completed and returned in the allocated time (Davidson & Tolich, 2003).

The Qualitative Approach

The qualitative approach originates from the fields of sociology and anthropology, and researchers using this method are interested “in the in-depth study of

humans and their experiences in order to understand the nature of these experiences and the effect they have on individuals” (Begley, 1996, p.122). In this approach, knowledge claims are based on constructivist, advocacy or participatory perspectives, where the meanings of experiences are socially and historically constructed in order to develop a theory or pattern (Cresswell, 2003). Qualitative methods use inductive logic, and “are generally regarded as being less ‘scientific’, less concerned with establishing causality, descriptive rather than explanatory, exploratory rather than testing”, according to Couchman and Dawson (1990, cited in Begley, p.122). Strategies of inquiry include phenomenology, grounded theory, ethnography, case studies and narratives (Cresswell, 2003).

The use of qualitative methodologies became noticeable in nursing in the 1980’s as a result of nurse ‘scientists’ obtaining their doctorates in fields such as anthropology, and continuing to use this method of research on their return to nursing. Using qualitative inquiry in nursing research may contribute to the development of existing theoretical frameworks, or may contribute to the development of new knowledge, especially in the understanding of personal experiences in health care settings, according to Morse (1991).

Advantages

Qualitative research enables the researcher to study a small sample in great depth, providing rich but a narrow range of data (Davidson & Tolich, 2003). The advantages of using a qualitative method like an interview is that the information gained cannot be pre-determined and comes from the participants (Cresswell, 2003). The qualitative approach

is effective with small groups and particularly with those who have difficulty with their language skills, as it enables the researcher to confirm that their questions are understood, and to clarify participant responses where necessary (Davidson & Tolich, 2003).

Disadvantages

In contrast to the advantage of depth, is the lack of breadth in a qualitative approach. It seeks to interpret and understand a particular concept or phenomenon with only a small number of participants, and thus the findings are unable to be generalised to the wider population. The qualitative approach can also be expensive in terms of the time it takes to complete the research and the costs associated with this, according to Davidson and Tolich (2003). Another potential limitation in using a qualitative approach is the difficulty compensating for researcher bias when it comes to data analysis. Fielding and Fielding (1986, in Begley, 1996, p.125) state that the two main sources of bias are likely to be: “the tendency to select data to fit a preconceived idea” and “the tendency to select data which are exotic, conspicuous or dramatic”. Morse (1991) also raises specific concerns about the use of the qualitative approach in nursing research. The first of these relates to the interdisciplinary transfer of a method designed for one discipline and used by another, without modification. Her concerns relate to the anthropological origins of qualitative research, and the appropriateness of directly transferring this to nursing. She questions the potential differences in assumptions, paradigms and goals each discipline may have in relation to using qualitative methodology, and the possible adaptation and mixing of methods to accommodate different research situations. She is also concerned

about inappropriate attempts to quantify qualitative data thereby creating issues about validity and rigour, and the use of qualitative methods to test theory, rather than using the data to provide the theory (Morse, 1991).

The Mixed Method Approach

The concept of mixing different methods began in 1959 in the field of psychological research, and since then has been used by a variety of researchers to provide greater understanding of their research problem (Cresswell, 2003). This approach is based on a pragmatic knowledge claim, using strategies of inquiry that collect data either simultaneously or sequentially. The data collected will comprise both qualitative and quantitative information in the form of numerical data (e.g., survey tool) and text data (e.g., interview). The assumption for using the mixed method approach is that collecting different types of data will provide a better understanding of the research question (Cresswell, 2003).

The use of mixed method studies has emerged across a variety of disciplines, but in nursing in particular it has allowed a deeper understanding and new insights into nursing theory and practice (Sandelowski, 2000; Seaton, personal communication, November, 2006). Shih (1998), in the review of the literature, found that nursing as a discipline needs methodological strategies that will help nurse researchers to discover and to describe the complexity of the health care environment. There has been a growing emphasis on combining qualitative and quantitative methods in a single study, in the practice commonly referred to as triangulation. It has also been suggested by Bradley (1995, cited in Williamson, 2005) that triangulation was introduced into nursing research

to overcome some of the weaknesses of the qualitative methods used in the 1950's and 1960's, but is still used today to overcome the limitations of any one method of data collection.

In contrast to Bradley's (1995) views, Weinholtz, Kacer and Rocklin (1995, cited in Sandelowski, 2000, p.254) state that "qualitative techniques have [also] been used to 'salvage' quantitative studies", illustrating its usefulness with different methodology. The use of triangulation in research has also been defined as "the combination of two or more theories, data sources, methods, or investigators in one study of a single phenomenon" (Denzin, 1989, in Shih, 1998 p.632), with the primary purpose being to confirm the researcher's findings and conclusions, and establish convergent validity. The convergent function is useful when researchers are measuring discrete constructs, according to Shih (1998).

Tashakkori and Teddle (1998) in their book "Mixed methodology: Combining qualitative and quantitative approaches" also make a distinction between mixed methods and mixed models. They state (1998, p.ix-x) that:

mixed methodologies combine qualitative and quantitative approaches in the methodology of the study (such as in the data collection stage), while mixed model studies combine these two approaches across all phases of the research process (such as conceptualisation) data collection, data analysis, and inference.

They believe that the mixed model approach to research is a growing trend in the social and behavioural sciences.

The Decision to use a Mixed Method Approach

For the purpose of this study, I decided to use a mixed method approach, aiming for breadth and depth with the data, in order to best answer the original research question.

The research approach combined the traditional questionnaire used in quantitative research and the group interview method used to collect qualitative data. It was anticipated that using a questionnaire with a follow-up interview would enable me to check the key findings of the large sample questionnaire with the smaller sample interview group. It would also allow me to clarify any ambiguities or extreme findings in the data, and explore specific factors of interest. This is an example of a sequential strategy of inquiry where the researcher uses one method to expand on the findings of another method (Cresswell, 2003).

The research question in the study focuses on the factors influencing student decision-making in relation to their final year clinical placements. Using the ‘factors influencing’ as the common unit of analysis ensured that this was the focus of data collection and analysis in both methods. It was therefore anticipated that the findings from this approach would contribute to knowledge about the discrete construct ‘influencing factors’, as a result of obtaining convergent validity with the data collected (Shih, 1998).

Advantages

According to Cresswell (2003), the mixed method approach enables the researcher to collect, analyse and integrate data sequentially, at different stages of the

inquiry. In addition the use of different methods overcomes the bias of any one single method study, increases confidence in the results, allows development and validation of instruments and methods, and allows divergent results to enrich the findings (Redfern & Norman, 1994, as cited in Begley, 1996). Using mixed methods promotes the rigour in research by gaining different research perspectives on the data (Williamson, 2005). Another advantage of using this approach is that “the results of one method can help develop or inform the other method” (Greene, Caracelli & Graham, 1989, as cited in Cresswell, 2003, p.15-16).

For the purpose of this study the quantitative data from the questionnaire administered to a larger group of students can be expanded and given a contextual picture when they are combined with the qualitative data from the smaller focus group interview. This enables the factors influencing decision-making to be placed within the wider social context of a nursing student today.

The advantages of collecting data using a questionnaire or interview have been generally discussed under their respective methodological approaches above, and more specifically under the Method of Data Collection below.

Disadvantages

The use of a mixed method approach also creates challenges for the researcher. They must be familiar with both qualitative and quantitative research approaches, as well as the limitations that using only one or other of these methods may otherwise have on their findings. The use of mixed methods also requires different processes for data collection

and analysis, and can be time-consuming for the researcher, as they will involve analysing both numerical and text data (Cresswell, 2003). Other disadvantages of this approach include the potential to compound the sources of error in the analysis, and that the use of multiple methods does not guarantee internal or external validity, or compensate for researcher bias (Redfern & Norman, 1994, cited in Begley, 1996). While these issues may be minimised by returning the qualitative findings to the participants for verification, and checking the numerical calculations for the quantitative data, there still remain philosophical differences between the choices of methodology (Shih, 1998). Again, the disadvantages of collecting data using a questionnaire or interview have been discussed previously, and the more specific issues that have been considered in using these tools can be found under the Method of Data Collection, which follows.

Method

The Research Setting

The research was situated within a school of nursing at a large tertiary educational institution in a main city in New Zealand. It was conducted over an 18-month period during 2005 and 2006. As the researcher, I was employed as a senior academic staff member by the same school of nursing, and had a clinical leadership role in the Bachelor of Nursing programme.

The Participants

The 64 participants in the study were all students in their third and final year of the Bachelor of Nursing programme. Students were selected at this stage in the programme as they had completed all their 'directed' or mandatory clinical experiences to meet the requirements of the statutory body, the Nursing Council of New Zealand, and were now in a position to choose their final clinical placements prior to sitting the final examinations for the registered nurse scope of practice. I obtained permission from the Head of the School of Nursing and Course Leader to speak to the students in advance to describe the research process and invite their voluntary participation.

Phase One of the study commenced a month later when an academic colleague spoke to the group again, distributed Part A of the questionnaire to interested students and collected the completed questionnaires. She repeated this process again for Part B of the questionnaire.

In Phase Two, students for the follow-up group interview were again accessed in a voluntary way. Due to personal circumstances outside my control, a time lapse occurred between the initial questionnaire and the follow-up interview. The follow-up interview was conducted a year after the initial questionnaire was completed, with another group of final year students. The students for this interview were recruited following a brief written explanation by the researcher on the student on-line notice-board, on the institution's website. I explained the purpose of the research, and invited interested students to contact me by email. It was explained to the students that they were a similar cohort to those used previously, and it was anticipated they would have had similar questionnaire responses. A group interview would allow me to follow up on

the key themes that were identified in the analysis of the original questionnaire and establish if these findings were the same or different with a group in a similar position a year later. It should be noted that my original intention had been to survey and interview the same group of students, thus enabling a sample of the same group of students to elaborate on the overall questionnaire findings. However as circumstances did not allow this to happen, I considered whether this was important or not. I came to the conclusion that as they were all final year students, and all either completed the questionnaire or were interviewed at a similar stage in their final year, it was also likely they would have similar views, and that the findings would still be valid and reliable.

Phase One: Collecting Quantitative Data

Using a Questionnaire

A questionnaire (see Appendix A) enabled specific information related to the clinical placement choices and career intentions of the participants to be collected. This data collection method was convenient for accessing an entire group of final year nursing students. Cohen, Manion and Morrison (2000) describe the semi-structured questionnaire as easier to analyse than individual interviews, in terms of quantity of information and time taken, and has the benefits of a structure, sequence and focus. The use of both open and closed questions allows for the collection of more data about specific questions, thus giving the opportunity for the respondent to reply in their own words while maintaining their anonymity. The disadvantages of using this method include the potential to limit the scope of information gathered due to the questions or

statements used, lack of opportunity to clarify any misunderstandings with the respondents, and the potential for a low questionnaire response rate (Cohen, Manion, & Morrison).

Questionnaire Development and Administration

The questionnaire was developed in consultation with nursing and education colleagues, who provided critique on its structure and potential ability to gather the data required. Feedback was also sought from a small group of final year students not involved in this project. Piloting the questionnaire helped “to increase its reliability, validity and practicality...” (Cohen, Manion & Morrison, 2000, p.260). This small group of students completed the questionnaire as a pilot and gave feedback on its clarity, ‘user friendliness’ and time taken to complete. Minor changes were made in relation to the feedback received. Examples of feedback included: “Very clear... easy to complete... suggest more space for comments.”

The questionnaire was administered to the selected group of final year students in two separate parts. Part A focused on the student’s anticipatory decision making about their choice of final year placements, and was completed by 64 out of a total of 69 students (93 %). This first part had seven questions. The first question focused on the time prior to entry to the programme, and asked students if they had any ideas about areas of practice they would like to work in as a registered nurse. This was followed by three questions related to the clinical areas chosen for their elective placements and the influence on these choices. The students were then asked to rate the level of influence of particular factors on their choices for their first elective placement, with provision for

additional comments if they wished. A Likert scale was included to enable students to rate the influence of each of the given factors from 'no influence' through to 'minor, moderate and major influences'. There was also provision on the scale for 'not applicable', and space for additional comments if they wished. The questionnaire concluded with a question related to their preferred areas of nursing practice in both the short and long term, following graduation. Cohen et al. (2000) support the use of a rating scale with provision for additional comments, as it allows for a flexible response from the respondent and enables the researcher to combine measurement and opinion for each question.

Part B of the questionnaire was a retrospective look at the decisions students made in relation to their first elective placement. This part was completed by 54 of the 69 students (77%) after they had finished 'Elective 1' but prior to the commencement of the second 'Elective II' clinical placement. This smaller number of responses is due to a lower attendance in class on the day that Part B was administered. At this point it was expected that the data would reveal factors related to students' decision making as they reflected on the reasons for their first placement choices.

The first question asked students to recall and briefly describe their first elective experience. The second question asked if this first elective met their expectations or not, and for comments to support this response. Question three asked for suggestions that would help clinical learning, and the final question again related to their first elective experience. It required mostly short answers, as well as a scale for them to rank the importance of the support they received from particular nursing staff or student colleagues during this time. Cohen et al. (2000) state that rank ordering requires

respondents to identify priorities in a given situation, and is useful in indicating degrees of response, similarly to the use of rating scales. In this questionnaire students were able to use the same ranking more than once.

Issues could arise as a result of using a retrospective view of the influences on student decision-making. A ‘retrospective shift’, or ‘response-shift bias’, is described by Goedhart and Hoogstraten (1992), Hoogstraten (1982), Howard, Dailey & Gulanick (1979a), all as cited in Manthei (1997), in relation to evaluation of training programmes and self-reporting of perceived abilities. They state “it is quite likely that the training experience itself will alter participants’ understanding of the concepts being rated and, therefore, their perceptions of their skills or competence prior to commencing training” (Manthei, p. 229). Howard et al. (1979b, in Manthei, p. 229) found that “it is likely that the beneficial effects of training will be underestimated”, as a result of a ‘response-shift bias’ towards the concept being measured. Thus, they and Hoogstraten (1982, in Manthei, 1997) recommended that participants rated themselves again ‘retrospectively’ after they had a post-test rating, “as they perceived themselves to be before completing the training.” This was considered to be a more accurate assessment of the effectiveness of training.

In this study therefore, it is possible that students may have over-estimated or exaggerated their lack of beginning skills or knowledge or the influence of particular factors on decision-making, in comparison to what they knew, three years later. However, the use of a focus group interview allowed me to explore this further using the questionnaire findings.

Phase Two: Collecting Qualitative Data

Using a Focus Group Interview

Group interviews provide a forum for wider discussion of the ideas introduced, the possibility of debate or group consensus, and the ability to verify ideas gathered via another research method (Lewis 1992, cited in Denscombe, 1998). However, they also have the potential for some individuals to dominate, or for some participants to be reluctant to contribute. To ameliorate potential problems the researcher can focus the group on a particular topic in order to explore specific themes or views, and encourage whole group participation in a way that is safe for individual members (Denscombe). It is from the interaction of the focus group that the data emerges, and it is recommended that the researcher keeps the meeting ‘on task’ without being overly directive (Cohen, Manion & Morrison, 2000).

In this study I enlisted the assistance of an academic colleague, who with the permission of the students helped me to keep the group focused on the topic, and ensure that quieter student contributions were not missed. As an observer she was also able to interpret body language and group dynamics during the discussion in order to improve the reliability of the findings. It also gave her permission to be my timekeeper and to keep me focused on the pre-arranged questions. Students had been posted an information sheet and consent form (see Appendix B) ahead of time requesting their permission for the interview to be audio-taped, and for a colleague to be present in an observation and support role.

The follow-up small group interview took place with seven students in an onsite classroom at the educational institution, for their convenience. A light lunch was provided as the interview occurred during the lunch break. All seven students had volunteered and agreed to take part in the interview, which enabled me to explore the themes that had emerged from the questionnaire data, with more specific questions. These questions focused on the relationship between the students' positive and negative clinical experiences and preferred areas of practice, as well as student needs related to career planning.

The interview focused on students' clinical experiences and career planning, as these were the areas identified from the questionnaire that required further exploration. (A copy of the questions used is included in Appendix B.) I explained to the students that the data had revealed that positive clinical experiences had a moderate to major influence on the group of students who answered the questionnaire. I invited them to comment on this and to give their own examples to see if the same factors would emerge, as found in the literature and the questionnaire responses. This would also demonstrate the persistence of these influences across student groups, and over time. Leading on from this, I then explained that the questionnaire data had revealed that students ranked negative clinical experiences as having no, or minimal influence on their next choice of clinical placements. This was a particularly interesting finding, as the data suggested that students do not see negative experiences as having a major impact on their learning, or their perception of a specific area of practice. I was very interested for the focus group students to comment on this finding, and to describe any of their own negative experiences and the influence these had on their elective choices, career ideas, and

preferred areas of practice. Career planning was another area of focus for the group interview. Nursing students often come into the programme with ideas about where they want to nurse once they graduate. I asked the student group if this was the case for them, and if they would tell me about it. If it was not their experience, I was also interested in what had influenced their ideas about their future practice. In addition, the majority of students in the questionnaire data predicted that their preferred areas of practice would be in a general hospital setting (like a medical or surgical ward) in the short term (i.e. up to two years following graduation), but in the mid-longer term (i.e. two to five years after graduation) they would be looking for nursing positions in the community. I asked the students in the focus group to comment on this. My final question surrounded career planning for a Bachelor of Nursing graduate as this was not explored in the original questionnaire. I asked them if they would share their personal career plans, and identify what had been useful and/or influential in regard to this process during the programme.

Ethical Considerations

The following ethical issues were considered during the completion of this study.

Ethical Approval

Approval was sought and obtained from the University of Canterbury Human Ethics Committee and the Christchurch Polytechnic Institute of Technology (CPIT) Academic Research Committee.

Informed Consent

It was important to stress to the participants that the researcher would maintain a high ethical standard. All students were informed of the aim of the project, and the proposed benefits for future nursing students. The information sheet (in Appendix A) that accompanied each part of the questionnaire also reiterated to participants that they understood they had consented to participate in the project by their completion of the questionnaire. They were informed on the same sheet that they could withdraw their participation, including any information they had provided, up until their questionnaires had been added to the others collected.

As previously mentioned, the seven students involved in the group interview were given an additional information sheet and asked to sign a consent form (in Appendix B) prior to the interview process, which allowed them to withdraw from the study without penalty at any time or decline to answer particular questions. They also consented to the interview being audio-taped with the provision that they could request for this to be turned off at any time during the interview, and for an academic colleague to be present to observe the process and help the researcher. This colleague was given clear guidelines as to her role in the interview process, and she agreed to maintain the anonymity and confidentiality of the participants and their contributions.

Conflict of Interest for Research

There were no foreseeable possible risks for the students taking part in this research or for Christchurch Polytechnic Institute of Technology (CPIT) as I was not involved in the teaching or assessment of these students. However, as I have a clinical

leadership role in the school of nursing and the title and position of Senior Academic Staff Member, it was important that the students felt no pressure to participate, and knew that there would be no repercussions should they choose to withdraw. Due to my clinical coordination role I enlisted the assistance of a colleague to negotiate and coordinate the clinical placements for both groups of students. This insured that I was not exposed to any conflict of interest and avoided any possible issues of power or coercion.

Confidentiality and Anonymity

Anonymity was assured for those students who completed the questionnaire as no personal identifying data was requested and I was not present during questionnaire distribution or collection. Confidentiality was also maintained by ensuring identifiers (e.g. ward/unit names) were not used which could link the response data to an individual person. Care was also taken not to name specific clinical areas or hospitals in the transcribed data, as this level of detail was not required for this study. General descriptors were used to describe different areas of practice only.

Confidentiality was also guaranteed for the group interview as the audiotapes used were kept in a locked filing cabinet and were destroyed on completion of the final report. I transcribed the interview myself, and my observer colleague, my supervisors, and I have viewed this information only. Student names were not recorded during the interview or transcription process, and they were only referred to as student 'V' or student 'J' in the follow-up discussion. Other possible identifiers (e.g. names of specific

wards/units) were also avoided again in the transcription to further protect the identity of students and specific workplaces.

Analysis

Analysis of the Data

Data analysis relates to the type of research strategy chosen, and in the mixed methods approach analysis can occur within and often between, the numerical and thematic text data (Cresswell, 2003). Two examples of this are the processes of data transformation, and the exploration of outliers or extreme findings. Data transformation enables the researcher to quantify the qualitative data to compare with other quantitative findings, or qualify the quantitative data by analysing the data from a measured scale and creating themes from this, and comparing these with themes from the qualitative data collected. The exploration of outliers in the quantitative data is another approach to analysis, where the researcher uses a follow-up interview, to explore why these findings are different from the rest of the data (Cresswell, 2003).

As the aim of this study was to explore the factors that influence student decision-making, a qualitative content analysis approach was taken with the text data in the questionnaire and the focus group transcript, and this was compared and contrasted with the quantitative data gathered from the questionnaire. During this process I kept reminding myself of the research question and thinking about what the data was saying

in relation to the factors that influence the students' decision-making. In addition, I noted any findings that were extreme or different, particularly to those found in the literature, so that I could follow these up in the follow-up interview. A description of how the quantitative and qualitative data was analysed is presented below.

Quantitative data were obtained from the scores students had assigned to various factors and qualitative data from the written comments. The questionnaire included boxes for participants to tick the appropriate area of practice chosen for Elective I and Elective II, as well as scales for the participants to rate and rank data relating to factors which influenced their decision-making. A five-point Likert scale was used to rate factors which ranged from 'not applicable' and 'no influence' though to 'minor, moderate and major influence' (see questionnaire in Appendix A). Frequency tables were used to calculate the number of students who responded to each question according to the discrete area of practice identified or level of influence of a particular factor, and these numbers were converted to a proportion of the total. (Refer to Appendix C for the 'Audit Trail' and a full description of the how the data was collected.) The numerical data was not used to generate descriptive statistics, however the calculated proportions were compared to the text data and analysed in conjunction with each other as part of the process of data transformation. This process raised further questions for me, which I explored in the small group interview that followed.

Qualitative data were provided from the questionnaire in areas provided for student comments about each of the influencing factors, as well as in response to specific open-ended questions. These were transcribed as documented by the students

and analysed for common themes. In addition specific comments were used to 'illustrate' the calculated numerical data, where this seemed useful.

The follow-up group interview was tape-recorded and transcribed verbatim but not returned to the students for checking due to the constraints of time. However, the group 'observer' was asked to read the interview transcription and comment on her perception of its accuracy. The only comment noted was the need for me to make it clearer in the transcript that there were three students involved in a three-way conversation towards the end of the interview.

Further thematic analysis occurred with the interview data, which sought to 'fill the gaps' in the data gathered from the questionnaire. Theme analysis refers to "the process of recovering the theme or themes that are embodied and dramatised in the evolving meanings and imagery of the text" according to Van Manen (1990, p.78). A comparison was made with the questionnaire themes in order to confirm, contrast with, and extend the original findings. These themes were validated by the group observer as a true reflection of the findings of the focus group discussion.

Issues of Rigour

Methods of establishing reliability and validity are important to all research, but particularly with qualitative research, where consistency of processes is essential to obtain rigour (Morse, 1991). Credibility and thus internal validity can be addressed by the use of respondent validation to check the data provided for accuracy, according to Lincoln and Guba (1985, as cited in Cohen & Manion, 2000). In this study, the questionnaire responses were not checked with the students due to the required

anonymity of the data collection process. The transcript of the group interview was not checked with the students either, due to a combination of time constraints for the researcher, and difficulty accessing the students who were preoccupied with study for their final examinations. However, as already mentioned the group ‘observer’ was asked to read the interview transcription and comment on her perception of its accuracy. Further credibility, and thus rigour, was also added to the study by using triangulation, to gain different perspectives from the data collected and to strengthen the overall findings. This view is supported by Lincoln and Guba (1985, as cited in Cohen, Manion & Morrison, 2000), and Williamson (2005).

External validity and the degree to which the findings can be generalised to the wider population or have meaning to others in similar settings is concerned with the issues of comparability and transferability (Cohen, Manion & Morrison, 2000). However, Lincoln and Guba (as cited in Cohen et al.) suggest that it is not the researcher who determines this, but the reader or user of the research. This necessitates the provision of rich descriptive research data for the ‘readers’ to decide how useful the findings are for a particular clinical situation.

Reliability of the results is another important component of rigour in research. In quantitative research, reliability is primarily concerned with whether the methods used to collect the data would obtain the same result if used again. However, in qualitative research, the researchers themselves are an integral part of the research instrument, particularly when using the interview method. In this situation the issue of reliability is concerned with whether someone else would get the same results if they conducted the

research. The use of an ‘audit trail’ is recommended as a technique to overcome this concern and is further discussed below.

Reliability

Reliability of the questionnaire could only be established if the same questionnaire was implemented with another group of final year students and another researcher and similar results were obtained on each occasion. Given that both quantitative and qualitative data were obtained, the individual uniqueness of participant responses and their personal situations, and the ongoing changes in the health system, the findings could be different if the research was conducted again in a different context (e.g., geographical location). However, if these variables were similar, the factors influencing clinical placement choices could well have a similar importance for another group of final year students. As the researcher is part of the research tool in qualitative research, Denscombe (2003, p. 273) states that “the issue of reliability ...is transformed into the question: “If *someone else* did the research would he or she have got the same results and arrived at the same conclusions?”

Providing a detailed account of the aim of the research, the method used and the rationale for the findings, help contribute to the reliability of the study (Denscombe, 2003). He also suggests that the use of an ‘Audit Trail’ (as in Appendix C) allows the reader to follow the researcher’s decision-making processes, and to consider whether they would have reached the same conclusions.

Validity

Threats to validity impacting on the researcher's ability to draw conclusions from the data must also be considered. In a quantitative research approach, validity may be affected by the size of the sample group, the quality of the data collection instrument (e.g. questionnaire), and by the methods used to analyse the data. However, when using a qualitative approach, validity may be affected by the subjectivity of individual respondents, the researcher's ability to be interested in the subject whilst remaining objective, and how triangulation techniques were utilised (Cohen et al., 2000).

Content validity for this project was addressed by using a questionnaire which covered a range of questions related to the decision making processes surrounding clinical practice of final year students. The use of a follow-up focus group interview also ensured that the researcher was able to explore some of these issues in more depth (Cohen et al., 2000).

Internal validity relies on the accuracy of the findings in relation to the data gathered. Cohen et al, (2000, p. 107) state that "the findings must accurately describe the phenomena being researched". The use of triangulation of methods and respondent validation to correct errors or add further information are some of the strategies used to improve the validity of the data (Lincoln and Guba, 1985, cited in Cohen et al., 2000).

Whilst respondent validation was not possible in this research, caution has been used not to make claims about the findings that cannot be substantiated. The amount and type of data collected has only allowed me to describe the influences on the decision-making process for the particular students involved.

“External validity refers to the degree to which the results can be generalized to the wider population, cases or situations”, according to Cohen et al. (2000, p.109). The questionnaire and follow-up interview used in this study were appropriate methods of obtaining the data required for the research question, and the findings and conclusions were similar to those found in the current literature. However, replication of the entire study with another final year group would further enhance the ability to generalize the current findings to other final year nursing students.

Objectivity

“The analysis of qualitative data calls for a reflexive account by the researcher concerning the researcher’s self and its impact on the research”, according to Denscombe (2003, p.273). In this study I have acknowledged any potential conflict of interest in relation to my academic role and the nursing student participants. However, the nature of my clinical role also gives me a greater understanding of the clinical background in relation to many of the factors identified by students and professional insight into the potential impact of these decisions. This has enabled me to “make sense” of the student comments, and the context in which they have made them. I have also had to be mindful of the potential for making incorrect assumptions about the data, and have discussed these with my research supervisors, to clarify and justify whether to include these views in the findings.

Reciprocity

Student participants were reminded of the intent of this research in the initial information sessions and again in the information sheets provided with the questionnaire, as well as with the consent form for the interview. These stated that it was anticipated that the findings of this research would benefit future Bachelor of Nursing students in relation to the clinical curriculum in general, and clinical planning in particular. I was aware that the timing of this research meant that the findings would not advantage the student participants themselves, but that it would give them the opportunity to contribute to the clinical education of future nursing students.

Limitations of the study

During the course of the research unexpected factors occurred which impacted on the sample groups and the timeline for data collection. Personal circumstances beyond my control prevented me from completing the data collection with the same cohort of students. Due to an externally imposed delay in the timeline, the questionnaire was completed by a final year group of students in 2005, and the follow-up interview occurred with a different final year group of students in 2006. Whilst it was disappointing not to be able to follow-up the same group, particularly in relation to the exploration of outliers in the questionnaire data, it was interesting in terms of the potential to discuss the findings with another group of final year students. This unexpected scenario helps to give support to the reliability and validity of the findings in relation to nursing students in the local context. It was also interesting that the time that

had elapsed between these two phases had not changed the importance of the factors that influenced student decision-making, and it should be noted that the clinical environments where the students gain their experience had also remained relatively constant during this time.

Another weakness of this study is a criticism of the design of the data collection tool itself. The questionnaire lacked questions related to the student's age, gender, previous work experience and family responsibilities. This omission prevented discussion with the literature about the influence of these factors. In addition I had not considered the possibility of being able to link individual student responses in Part A with those in Part B of the questionnaire. This would have been useful to see if there were any differences in individual student decision-making before and after Elective I, thus being able to compare their anticipatory and retrospective decision-making processes. In hindsight I believe this could have been achieved by providing each student with a unique code, which they could put on the top of their questionnaire. The course leader who distributed and collected the questionnaires, thus ensuring I was removed from the process and therefore unable to establish their identity, could have implemented this.

The potential impact of students being influenced by each other when answering the questionnaire and during the interview is another potential limitation to this study. It is hard to control for this when questionnaires are being completed in classroom settings, although after analysing all the questionnaires it does not appear that there are any which have exactly the same responses. However, it is possible that the discussion that arises when working through the questions may influence a student's response. As the group

facilitator, it was easier to manage the influence of others during the interview process. In this role I was able to ensure that all students had the opportunity to answer the questions, and to recognise when someone dominated the interview or was reluctant to contribute. The presence of a group observer also ensured that I conducted the group interview process appropriately.

Finally, while I believe the results of this study will be of interest to nurse educators, nurse managers and nursing clinicians in the local and national context, they may be limited in their usefulness to a wider international audience. This is because the local social, cultural, and clinical environment pressures associated with nursing practice in the New Zealand context have influenced the students in this study. However, once these are taken into consideration, the factors influencing their decision-making could be applied to students in other educational settings.

The primary focus of this study was to identify the factors that influence nursing student decision-making in relation to their clinical placements in their final year. A mixed method research approach was used to give breadth and depth to the data collected. This chapter has provided a detailed rationale for using this approach and justification for using a questionnaire and focus group interview as the methods of data collection. The process and decisions involved with data analysis have also been described in preparation for the following chapter, which presents the findings. Limitations associated with the study have also been raised and the potential impact of these on the overall findings.

CHAPTER 4: QUESTIONNAIRE FINDINGS

In this chapter I present the data analysed from the questionnaire administered in the first phase of this study. The findings from the follow-up group interview are included with the discussion in chapter five. The literature previously reviewed revealed a range of factors that could influence student decision-making in relation to clinical placement choices, ranging from those that are personal or come from within the student themselves, to those that influence a student from the external environment. The following findings from the analysis of the questionnaire help to contextualise these factors with a group of students at a local level.

The questionnaire was administered to the selected group of final year students in two separate parts. Part A, which had 64 student participants, focused on the student's anticipatory decision making about their choice of final year placements, and part B, with 53 student participants, was a retrospective look at the decisions students made in relation to their first elective placement

Part A – Looking Forward

In Part A of the questionnaire students were asked about areas of nursing practice that interested them, the impact of factors that may have influenced their decision making regarding final year placements, and their preferred area of practice as a Registered Nurse in the short and longer term. I was interested in any aspects that

contributed to student decision-making in anticipation of these final year clinical experiences.

Future areas of interest as a Registered Nurse prior to commencing programme

To determine whether students had any preconceived ideas that may have influenced their decisions, they were asked if they had an idea about the area of practice they would be interested in working in as a Registered Nurse prior to starting the Bachelor of Nursing programme. More than half the students (55 %) said yes to this, 31 % said no, and 14 % were unsure.

Of those who said yes, approximately 71% gave examples of areas of practice that are situated in general hospital settings like paediatrics, operating theatre and the emergency department. This figure excludes the possibility of specialised mental health units situated in hospitals, but for the purpose of this study includes the assumption that paediatrics or caring for sick children occurs in a hospital environment. I made this assumption based on the likelihood that prior to entry to the programme students were likely to have limited knowledge about the range of specialised areas involved in the delivery of health care. Some students indicated an interest in general medical or surgical nursing, but many were able to identify specialty areas of practice as well (e.g. operating theatre). The most popular areas of practice were those associated with children, which 40% of students chose, noting areas like paediatrics, neonatal intensive care, and child and family health nursing. The remainder of students indicated an interest in working in mental health (14%), the community (9%), and the other 6% answered

‘yes’ but did not specify a clinical area. These percentages and areas of practice are shown in Table 1 below.

Table 1

Percentage of students in areas of practice where they were interested in working as a Registered Nurse prior to starting the nursing programme

General hospital setting				Mental health	Community health	Other practice areas
Child & family focus (e.g. NICU, paediatrics)	Medical or surgical area	Emergency department	Operating theatre			
40%	11%	11%	9%	14%	9%	6%

Elective placement choices

Final year students in the Bachelor of Nursing programme currently have two 5-week clinical placements called ‘Elective I’ and ‘Elective II’. They are given this name as the student is able to ‘elect’ where they want to have this clinical experience, as long

as there are no clinical or academic issues that would conflict with such a request.

Students are asked to submit first and second choices for each elective experience. It is usual for Elective I to be completed prior to students submitting their choices for Elective II. Due to the demand on clinical placements locally and nationally, students will not always get one of their choices. If this occurs, then further negotiation takes place with the student to select another preferred area of practice. Clinical placements are balloted if there are limited places available.

When asked what general area of practice they had chosen for their first elective placement (Elective I), more than half (58%) of students indicated a medical or surgical ward experience. Within this group the split was virtually equal between those wanting a medical or a surgical placement. There were also 13% of students who had chosen a community health experience, which could include a range of placements from district and rural health nursing, to school health or occupational health nursing. In addition another 11% of students indicated a placement in a child and family health area. I was unable to ascertain from the data whether these child and family experiences would be in community or hospital inpatient areas, but realise that these students would increase the proportions of students in either the hospital or community numbers if this information was known. A smaller proportion of students (9%) indicated a preference for a mental health placement for this elective, with the remaining students scattered across specialised areas of practice like oncology and rehabilitation. Overall, however, there was a clear preference for this first experience to be in a medical or surgical area in a hospital setting.

Students were also asked to indicate what area of practice they anticipated choosing for their second elective (Elective II). As mentioned earlier, students are not required to submit their requests for Elective II until after they have completed Elective I. This is because the first experience may well influence their choice for their second experience, in either a positive or negative way. Further discussion on the impact of previous positive or negative experiences is discussed later in this chapter in relation to a range of possible influencing factors on student decision-making.

The proportions of students selecting particular areas of practice were quite similar for both Elective I and II (see Table 2 on the next page). The notable differences were an increase in those seeking experiences in other hospital specialties, in mental health placements, and in the community, with a decline in those seeking experience in child and family, and surgical areas. However, overall the percentage of students seeking general hospital elective placements (60-67%) was similar to those showing interest in these areas of practice (71%) prior to entry to the programme.

Table 2

Percentage of students in areas of practice chosen for Elective I and Elective II placements

	Areas of practice within general hospital settings				Other practice settings		
	Medical	Surgical	Other specialties e.g ED	Rehabilitation	Child & family	Mental health	Community health
Elective I	30%	28%	4%	5%	11%	9%	13%
Elective II	28%	17%	12%	3%	6%	14%	20%

Factors influencing student decision-making

Prior to being asked to rate particular factors that may have influenced their choice of clinical placements students were asked to comment generally on what had influenced this process. This question was intended to draw out a range of individual factors, some of which I might not have considered. All students answered this question and most of their responses appeared to relate to factors that I had listed in the next item

of the questionnaire. While this created some replication of data requested from students, that students also considered these factors to be important, gave the questionnaire additional content validity. It also created an opportunity for students to provide individual comments, giving further meaning to their ratings that followed. The main factors identified from these written comments were firstly, the need to further their clinical skills and experience, secondly, the opportunities for new graduate programmes, thirdly, the impact of previous clinical experiences, and finally, future career planning. Examples of these are given below:

Clinical skills and experience

“Recognise it is an area where a variety of skills can be implemented.”

“Gaining exposure and skills in each area of interest to enable the final decision-making process.”

“To broaden my skills and employment opportunities.”

Impact on chance of getting a position on a new graduate programme

“I would like to do my new grad programme there.”

“Increase the chance of getting into new grad programme.”

“Want to make sure I will be happy working in an area before choosing it for my grad course.”

Previous clinical experiences

“What I enjoyed the most and where I thought my talents were.”

“My directed placements made me realize what I didn’t want to do.”

“Working out in the community... and also working in rural medical practice.”

Future career plans

“To see if this area is where I want to work in the future.”

“Where I can see myself working in the future.”

“My vision for starting my own business in this field.”

The remainder of the comments covered a broad range of factors including the ‘availability of particular placements’ which was in the body of the questionnaire, but the ‘ability to use nursing knowledge’ was a factor I had omitted.

Students were next asked to rate the level of influence of a range of given factors on their placement choices for Elective I and II using the Likert scale provided. These ranged from an interest in particular areas of practice, to a variety of factors pertaining to the clinical learning environment, as well as geographical location and employment and career opportunities (see Appendix A for the full list of factors). The number of student responses for this question was consistently higher for Elective I than Elective II placements across all factors. However, while student responses for Elective II were lower and potentially weaker for the factors listed, it is notable that they still supported, rather than negated, their responses for Elective I.

The factors that were rated as having a moderate or major influence are listed in Table 3 . These are the factors that appeared to have a significant influence on decision-making for students in this study, particularly for the first elective placement (Elective I). There was a proportionately weaker but still present influence for the second elective placement (Elective II).

Table 3

Percentage of students who rated factors as having moderate or major influence on elective placement choices

Moderate/ Major Influencing Factors	Elective I Placement	Elective II Placement
Interest in a particular area of practice	88%	77%
Career plans – short term	75%	66%
- long term	64%	59%
Previous positive clinical experiences	76%	52%
Need more experience in a particular area	72%	66%

There were very few comments related to *‘interest in a particular practice area’*, as rating this question is quite straightforward using the scale provided. One student who did comment tended to be qualifying their rating. For example:

“Not really interested in hospital based setting but chose for Elective I as I thought it was important for skills and employment prospects”.

Examples of comments related to *career plans* tended to elaborate on what these were. For example:

“I guess I’d like to have a child/family health focus and intend to do maternity in the next couple of years so I can travel with this.”

Previous positive clinical experiences were important for a large number of students. They provided a variety of comments and specific examples of areas they found good for their learning. One example of this is:

“I find going into a new area takes me a while to get into the ward routine and I hope to overcome this down time by returning to a previous good placement.”

Also of note is that all the positive experiences mentioned were the same areas that these students indicated as their predicted preferred areas of practice as a Registered Nurse in the short or long term.

Students who indicated they ***needed more experience in a particular area*** tended to be seeking more skills in general medical or surgical nursing, or in specialist areas like child and family or mental health nursing. For some students this appeared to be linked to future career plans, as in the following example:

“I feel more experience is needed if I wish to specialize in mental health.”

The researcher also decided to consider any degree of influence that factors may have had on student decision-making, and those that had a minor, moderate or major influence creating a combination of more than 50%, are listed in Table 4 on the next page. This table lists additional factors to those listed in Table 3 above, and again there is a proportionately weaker influence from these factors for Elective II.

Table 4

Percentage of students who rated factors as having a minor, moderate or major influence on elective placement choices

Minor/ moderate/ major influencing factors	Elective I placement	Elective II placement
Reputation of clinical area as a positive student placement	57%	47%
Awareness of employment opportunities for new graduates	82%	67%
Availability of new graduate programmes linked to particular clinical agency	64%	56%
Preference for particular hospital or clinical agency	71%	52%
Geographical location	61%	53%

The *reputation of a clinical area as a positive student placement* had some degree of influence for approximately half the students. A few students chose to comment on this factor. The example below indicates that this factor is important for this student, but is expressed in rather a negative way:

“Very important. Don’t want to go where people have had bad experiences.”

Awareness of employment opportunities for new graduates appeared to have a significant influence on student decision making, as well as the *availability of new*

graduate programmes in a particular clinical agency. Students mentioned being influenced by what other students and nurses had experienced or recommended as being ‘a good idea’ for both these factors. Two typical comments were:

“Feedback from previous students provided me with the path I should be taking to get into a new graduate programme” and “very aware of what I need to do, or what others say I need to do.”

Preference for a particular hospital or clinical agency elicited comments with names of specific hospitals, which I have withheld in order to maintain anonymity for the students involved and specific clinical areas. However, reasons for this preference ranged from the type of clinical experience offered to practical issues like the availability of car-parking.

The final factor that influenced the choice of clinical placements was **geographical location**. While a third of students clearly rated this as having no influence over their decision-making, the greater majority indicated that it did. Thus comments ranged from:

‘If I want to do it, where it is does not matter!’ to “I am married and close to family members so location is important.”

There were two factors that approximately half the students indicated were ‘not applicable’ or had ‘no influence’ over their choice of placements. These were **‘feedback about a specific placement from other students’** and **‘previous negative clinical experiences’** (see Table 5 on the next page).

Table 5

Percentage of students who rated factors as not applicable or having no influence over their decision-making

Factors which were not applicable or had no influence	Elective I Placement	Elective II Placement
Previous negative clinical experiences	64%	52% ^a
Feedback about a specific factor from other students	58%	30%

^a 17% of students did not respond to this item for Elective II

Many students (64%) indicated (for Elective I at least) that previous negative experiences were not an issue. The responses for Elective II are inconclusive due to the large number of nil responses, which could change the figure of 52% significantly either way. Nevertheless it should be noted that the Elective I figure raises the questions as to whether these students had a previous negative experience or not. If they did, then it would appear not to have an ongoing influence. However, as 76% of students had previously indicated the moderate or major influence of a 'previous positive experience', it may well be these same students are indicating 'no influence' from negative experiences simply because they did not have one. It was surprising that there were only

two comments in total about negative clinical experiences, and the negative impact these would have on working in those areas in the future. The remainder of comments suggested that students were able to see beyond any negative experiences to the potential learning opportunities available. For example:

“Negative experience for X in Stage X so want to gain positive experience in this setting before I have to work in the real world.”

‘Feedback from other students’ was another factor that 58% of students rated had ‘no influence’ or was ‘not applicable’ to their decision-making. This is interesting given that students did seek feedback about other factors, for example ‘potential employment opportunities’ and the ‘availability of new graduate programmes’.

Students were also invited to add further comments about why they had chosen particular elective placements, which gave me the opportunity to consider additional factors. The only comment that did not belong with those identified already was:

“I am a mother and want to have more children.”

While this factor had been identified in the literature related to career development in nursing, it was an oversight not to consider the impact of personal and family relationships in the questionnaire.

Short and Long Term Career Plans as a Registered Nurse

The final question in Part A asked students what they anticipated as their preferred area of practice as a registered nurse at the time of completing the questionnaire. Students were asked to respond to this in both the short term (up to two years after graduating) and in the long term (more than two years after graduating).

In the short term the clear majority (72%) of students wanted to work in a hospital setting. Of these, most saw themselves working in a medical or surgical ward with the remainder indicating specialty areas or units within a hospital (e.g. paediatrics, Emergency Department). Only 9% of the total students preferred to work in a community health setting, 6% in a mental health setting with the remaining 13% unsure or planning to work overseas. These data are presented in Figure 1 below:

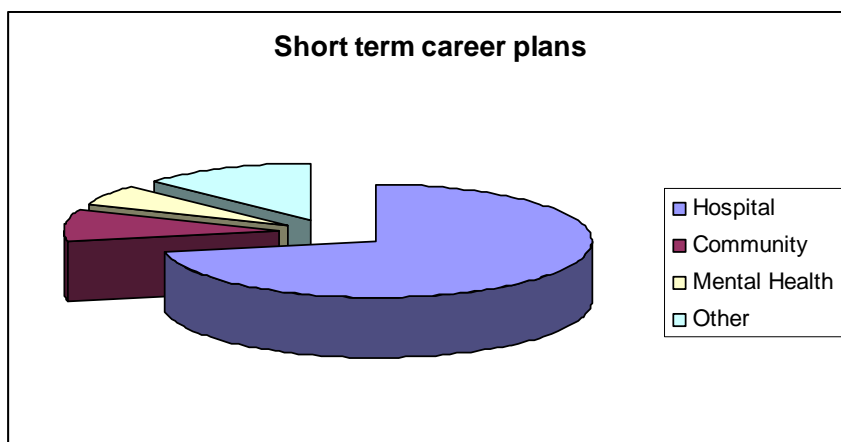


Figure 1: Short term career plans

It is interesting that in the long term these figures change around, with more students predicting that they will want to work in the community (38%), compared with only

30% in hospitals, and the same number as previously (6%) interested in mental health. Eight per cent of students saw themselves working in a humanitarian capacity in a third world country. The remaining students (18%) were still unsure about their long-term career plans at this stage. These percentages are presented in Figure 2 below:

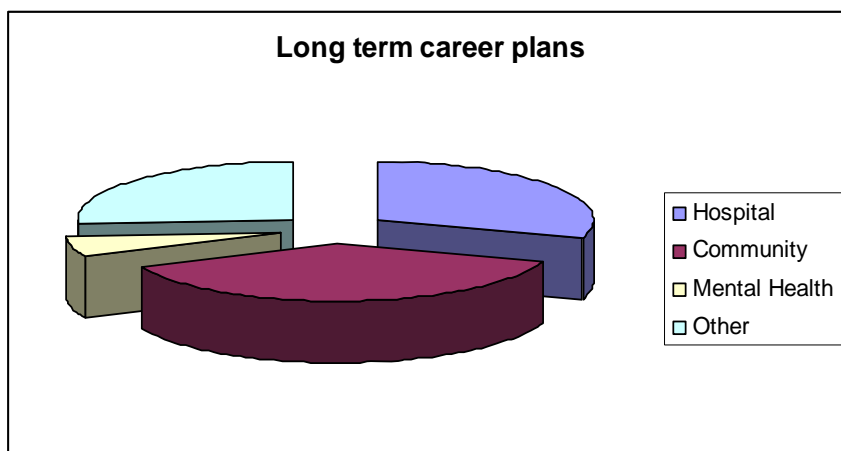


Figure 2: Long-term career plans

It is also interesting to note that the above 'hospital versus community' trends are similar to those already described. For example, prior to starting the Bachelor of Nursing more students wanted to work in hospital settings rather than the community, as is also the case for both Elective I and II placements. This is also reflected in the above short term career plans (up to two years after graduation). However in Elective II students are beginning to show an increase or expansion of interest to working in the community, as is the case for their predicted long-term career plans (more than two years after graduation). It should be noted that the mental health percentages are not included in the

hospital or community figures listed. They have been categorised separately as students were not specific about where they wanted to work in mental health (i.e. in hospital or community agencies). Table 6 on the next page summarises the proportions of students and trends across different areas of practice for both elective clinical placements, and short and long-term career plans.

Table 6

Percentage of students across different areas of practice for elective clinical placements and short and long term career plans

Clinical Area		Elective I	Elective II	Short term career option	Long term career option
General hospital	Medical or surgical	58%	45%	53%	16%
	Child and family	11%	6%	5%	6%
	Other specialties	9%	15%	14%	8%
	General hospital totals	78%	66%	72%	30%
Community health		13%	20%	9%	38%
Mental health		9%	14%	6%	6%
Other		0	0	13%	26%

Figure 3 below presents the proportions of students and trends across different areas of practice for both elective clinical placements, and short and long-term career plans, in a more visual way. This shows more clearly the large percentage of students that want to work in hospital settings in the short term, with a notable increase in interest in working in the community only in their long-term plans.

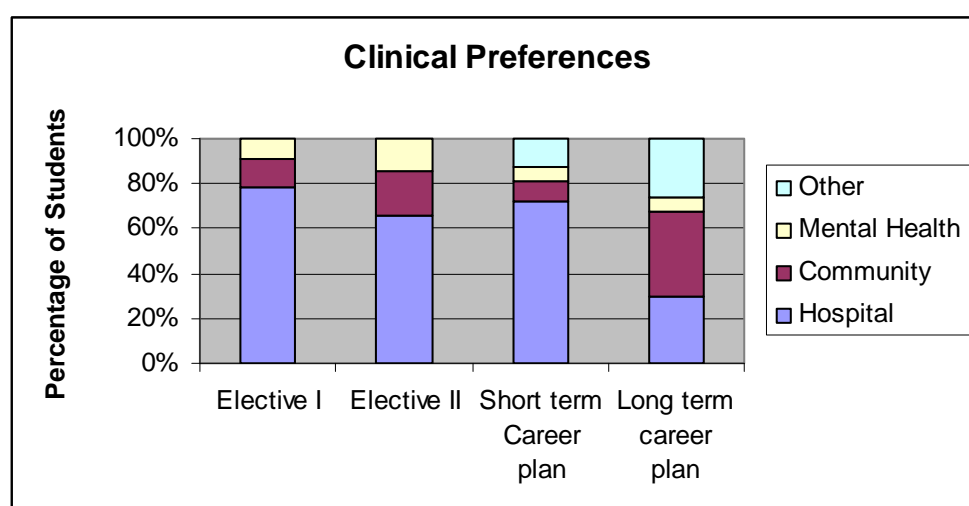


Figure 3: Percentage of students interested in different clinical settings for elective placements and short and long term career plans

Relationships between influencing factors

The data from the questionnaire were reviewed again to look at possible relationships between the factors that appeared to have a moderate or major influence on student decision-making. For example, student ratings of the influence of *a particular*

interest in an area of practice and the influence of *short and long term career plans* were compared. I thought that if students had a particular interest, that this same area would be likely to be related to their career plans. The findings confirmed that there was a definite relationship between these factors. Nearly two thirds of the students (63%) rated both *interest and short term career plans* as having a moderate to major influence on their decision-making for their choice of placement for Elective I. There was also a relationship between both for their choice of placement in Elective II, with 58% of students rating them as a moderate or major influence. Also supporting this trend, 56% of students again rated both these factors as an important influence when selecting elective placements when looking at long- term career plans as well.

Following up on this ‘interest’ factor, I decided to look at the group of students who started the nursing programme with an established interest in working with children, once they had graduated. Of the fourteen students who identified this, half chose an elective placement in their final year with a child focus. In addition another four students chose an elective placement in the community where it is also highly likely that they would be working with children and families in some capacity, meaning that eleven of these fourteen students (79%) were planning to continue their initial practice interest in the short-term. Also of note is that nearly all fourteen students (thirteen out of fourteen) indicated they still planned to work with children and families as a career pathway in the future.

The ‘interest’ factor is not just unique to working with children. In another example I looked at students who indicated they were interested in working in ‘accident and emergency’ type areas, prior to starting the programme. Although small in number,

three out of the four students also maintained this interest through to their final year, with it still remaining a preferred area as a career at the end of the programme. Another student also selected this as an elective placement with the goal to pursue a career in this area. All these students rated 'interest' and 'career planning' highly in relation to this area.

The impact of *positive clinical experiences* was also considered in relation to interest in a particular area of practice and short term career planning. There was a clear link between a positive experience and interest in an area of practice for students, as 67% indicated these were both moderate to major influencing factors when considering their Elective I, and nearly half the students (49%) indicating this when considering Elective II. There was also a relationship between the influence of a positive experience and short-term career planning when selecting Elective I (50%) but less so for Elective II (40%).

In conclusion, this part of the questionnaire revealed that there were definite links between the factors that related to areas of practice interest, career planning and positive experiences.

Part B: Looking Back

Part B of the questionnaire was completed after the first Elective I placement but just prior to Elective II starting. Students were asked to look back at the decisions they had made in relation to Elective I to provide a retrospective view of their decision-

making. Only 53 students completed this part of the questionnaire compared with 64 students in Part A.

Expectations of Elective I

Students were asked if they could recall what their expectations were of the first Elective I experience. The majority (60%) expected that they would increase their confidence in nursing skills and apply and extend their nursing knowledge. Examples of typical comments are:

“To gain general clinical experience and increase my skills.”

“Very good for increasing my confidence and competence.”

A few students (7%) commented on meeting personal goals and exploring areas of practice for future careers. Of the remaining third (33%), some just said ‘yes’ without further comment, some said they could not remember what their expectations were, and the rest did not answer this.

Reasons given for Elective I meeting their expectations overwhelmingly referred to the positive supportive clinical environments they were working in. Students believed they met their learning goals and were appropriately extended in their skills and knowledge. For example:

“Gained appropriate skills for the area, increased workload, and worked more independently.”

Only a few students felt their experiences did not meet their expectations.

Reasons given for this included the type of placement, limited learning opportunities, inadequate feedback on their performance and lack of continuity with their preceptor.

Preparation for Elective I

Most students felt well prepared for their Elective I experience and made positive comments on the usefulness of the on-line Clinical Placement Directory where they could access relevant information prior to starting. Only a few students felt they were lacking information that would have enabled them to meet their learning needs more effectively, and these related to greater knowledge about career opportunities within nursing.

Key support roles in the clinical area

Finally, students were asked to rank the importance of a range of nursing positions in the clinical area in terms of student support. The most important support for students was the Registered Nurse preceptor who is assigned to supervise their clinical learning. Nearly all students (96%) ranked this person as the 'important' or 'most important' support person in their first elective placement (Elective I). An example of a student comment is:

“The staff and especially my preceptor always pushed me and challenged my thinking.”

One student did not respond to this question, and another had a confusing response which was most likely a scoring error. They indicated that it was ‘not applicable’, but their comment, reflecting a near textbook definition of the preceptor role, clearly implied the opposite:

“I got to work mostly with one buddy (preceptor) which allowed her to get to know me and give me the freedom to work more independently and become more confident and competent.”

The clinical lecturer was also seen as an important support person with 76% of students indicating this. The lowest rankings for student support were given to the unit manager or charge nurse of a particular clinical area and other students who were sharing the same clinical placement. Only 54% of students ranked the nurse-in-charge as ‘important’, with more than a quarter (28%) ranking this role as ‘least important’. Other student colleagues were only considered important support people by 36% of students, with 59% of students ranking them ‘least important’.

A general retrospective view

Looking back, the majority of students who responded to Part B of the questionnaire were happy with the decisions they had made for their first elective placement (Elective I). Nearly two thirds of the group (60%) had their expectations met, and felt they had increased their knowledge and skills in supportive clinical environments. The Registered Nurse preceptor was clearly the most important support person with the clinical lecturer playing an important support role as well.

This chapter has provided the findings from both parts of the questionnaire administered to a group of local students. It has enabled a variety of data to be presented that reflects the many different factors that this group of students found to be important and influential when they were required to make decisions about their clinical experiences in their final year. The following chapter will discuss these findings in relation to the existing literature and use examples from the follow-up focus group interview to illustrate the key themes identified.

CHAPTER 5: FOCUS GROUP INTERVIEW FINDINGS AND DISCUSSION

In this chapter I will discuss my questionnaire findings within the context of the literature reviewed, drawing on information from the focus group interview to help illustrate this discussion. The literature revealed a range of possible influences on student decision-making in relation to clinical placements, from those that came from the student's internal self like age, gender, personality, learning styles and career aspirations, to those that impacted on the student externally, like the clinical learning environment, society and the media, and the influence of location and place. The process of decision-making will also be discussed in relation to the students in this particular study.

The Influence of Self

A significant finding in this study was that nearly 90% of students indicated that an interest in a particular area of practice was a moderate or major influence on their decision for Elective I, and nearly 80% indicated this for their decision for Elective II. This interest may have existed prior to entry to the programme, or have been stimulated by one of their many clinical experiences throughout the three-year programme. The influence of a pre-existing interest has also been discussed below in relation to the influence of nursing education and career plans. However, individual student personality

and values can also influence decision-making, and as a result students will be attracted to different areas of practice. Happell (1999), Ferguson and Hope (1999), Haffner and Proctor (1993), and Yonge (1997) all refer to individual attributes that attract nurses to different specialty choices. The questionnaire used in this study did not ask students to elaborate on why they had chosen particular specialties, but students in the follow-up group interview did provide some insight into this. The examples that follow show that these students were attracted to different areas for different reasons.

Student (P) chose an area that Haffner and Proctor (1993) would describe as an ‘action orientated’ specialty, which had elements of drama and the unexpected in the nursing practice. This student’s personality style also appeared to fit with the extroverted personality type that Yonge (1997) described from the Myers –Briggs Inventory, with a high need for the stimulation of working with people and groups in a busy environment. (P):

“ I chose placements where I could use my knowledge simultaneously... like the trauma unit...with patients needing surgery, and with high medical and psychological needs...therefore, I was able to practice nursing in a comprehensive manner.”

Whereas student (V) selected the following ward which Haffner and Proctor (1993) would describe as a more ‘procedural’ specialty that involves nursing more passive patients in a high technology environment. (V):

“ I chose Ward X because I wanted hands-on experience to increase my knowledge in a vital area like cardiology...I learnt a lot in that ward”.

However student (R) opted for a different area again, which could be described as a combination of Haffner and Proctor's (1993) 'procedural' specialty, and an area where nurses are able to spend more time with their patients. The emphasis on empathy and holism incorporates aspects of care which Ferguson and Hope (1999) described are suited to mental health nursing, and the area which student (R) described is focused on the physical and mental health needs of the older patients. (R):

"My stage x placement was with older people at x hospital...I loved that and have gone back for an elective placement there...I am interested in rehab nursing which I do enjoy...therefore a career pathway."

The need for more experience in a particular area of practice was also a moderate or major influence on clinical placement decisions for approximately 70% of students in the questionnaire. Many students wanted more experience in general medical or surgical nursing, or in specialist areas like child health and mental health nursing. Yonge (1997) described the relationship between personality and learning styles and the importance of students knowing how they learn best, so that they enjoy their placement more.

Individual student learning styles will affect how students interact with their nurse preceptors and with their clients (or patients) according to Yonge (1997). If students understand and can identify their individual learning styles they can consider this when they are involved in clinical placement decisions. One student illustrates both the positive and negative impact that a clinical placement can have on their learning. While there were other factors that also contributed to this poor learning experience,

principally it appears that the student was not suited to this particular environment and therefore was unable to make the most of the learning opportunities.

(M):

“I was looking forward to acute mental health...I found the area too hard emotionally...I had complicated patients and found it really hard to deal with...I don’t think it would be a healthy area for me to go to in the future.”

On the other hand the same student (M) had a positive experience in a completely different area that did meet her learning needs, as illustrated in the following example:

“ I had gaps in my knowledge and hadn’t had anything to do with cardiac nursing, so chose to go to this area for one of my electives...and learnt a lot.”

Age, gender, family situation and previous work experience, which all featured in the literature as factors affecting decision-making were generally not volunteered by students in the questionnaire or group interview findings and unfortunately were not specifically asked for. One student in the interview did make reference to her age in terms of what clinical staff expected her to know, but not specifically in relation the influence on her decisions, and another student commented on her family commitments in relation to location of her clinical placements.

The Influence of the Clinical Learning Environment

Previous positive clinical experiences were also rated as a moderate or major influence in relation to placement choices by 76% of students for Elective I, but only

52% for Elective II. Perhaps the timing of the completion of Part A of the questionnaire (that is just prior to Elective I) made the memory of previous positive experiences more immediate and important for students. While these past experiences were an important factor in initial placement selection, the need to have a positive experience once they had arrived in a clinical area was also an important factor in meeting their learning needs. A relationship between positive clinical experiences and career plans also existed, as students noted these as their preferred areas of practice as registered nurses in the short or long term.

Positive and supportive clinical learning environments were also a common reason given by students in Part B of the questionnaire when asked if Elective I had met their expectations. Many referred to the positive supportive clinical environments they had worked in where they met their learning goals and were appropriately extended in their skills and knowledge. Looking back can create a 'retrospective shift' or 'response shift bias' according to Goedhart and Hoogstraten (1992) and Howard, Dailey and Goulanick (1979a), as cited in Manthei (1997) and it is possible that students may underestimate what they have learned and overestimate their beginning lack of knowledge and skills. In this scenario it is hard to comment on the potential impact of this time-lapse but it may help to explain why a third of the group (33%) said they could not remember, or had very brief answers to this question.

However, while personal previous positive experiences were an important factor in student decision-making about their placements, the actual reputation of the clinical area as a positive student placement was important but not as quite as influential. Only 57% of students considered this had any degree of influence in relation to their Elective I

choices and 47% for Elective II choices. One of the students in the questionnaire commented:

“Important. You don’t want to go where people have had bad experiences.”

When I followed this up in the focus group interview student (P) said:

“ I haven’t had a negative experience but I did take on feedback from other students who had been on other wards... the things they said...it definitely swayed my opinion on where I chose to go....”

Many students (64%) indicated (for Elective I) that previous negative experiences or feedback about specific factors from other students had no or minimal influence on their choices, which supports the findings above about the reputation of different areas. It was surprising that there were only two comments about negative clinical experiences and the negative impact these would have on working in those areas in the future. I had expected that there would be more negative comments in the questionnaire due to the ability of students to remain anonymous, and the previous anecdotal evidence I had received in my clinical role. However, the students in this study appeared able to reframe these experiences and I am wondering why they would do this? Perhaps the clinical lecturer or the preceptor helped to put some of the negative experiences into context for students, thus turning them into learning opportunities. Or perhaps students had prior knowledge that these experiences could occur and accepted them as being part of the reality of nursing. However, when I explored this finding with the students in the focus group I found that they had quite a different view and in fact

found their experiences to have quite a negative effect on their interest in particular areas of practice. Examples of their responses follow:

Student (C):

I had a negative experience with a preceptor in Stage x in a medical placement which put me off medical altogether... It wasn't to do with the work but the staff."

And student (R):

"My first day on a surgical placement and my preceptor dropped me right in it...it really freaked me out...I thought he would fail me...so I am definitely not going back to surgical for at least 5 years...it really shattered my confidence."

So, interestingly, the group of students who completed the questionnaire and the group of students who attended the group interview dealt with negative experiences differently. This is a good example of the way that similar factors can cause students to react, and how they can influence individual decision-making differently. Armundson (1995, p.2) wrote that "persons with high levels of self-awareness and personal agency are in a better position to respond proactively to external circumstances and exert more control over long-term effects." This view is also supported by Andrews et al. (2005), Dunn and Hansford (1997), and Papp et al. (2003) who found that students who are proactive and self-directed in their learning styles are better able to develop strategies to meet their learning needs under adverse conditions. In this study the issues may or may not be student-centred, or there may be other events occurring in the clinical area, but

one consistent finding is that the preceptor and the clinical lecturer are key support people to students in the clinical learning environment.

In Part B of the questionnaire students were given a list of key clinical staff and asked to rank whose support was most important to them during their first elective (Elective I) placement. Overwhelming 96% of the students identified the registered nurse preceptor. This was further supported in the group interview as the following examples show:

Student (G): *“ I think at the end of the day that the preceptors are most important...they have the biggest impact over your placement and I have seen where the personalities between students and preceptors is just not right.”*

Student (V): *“I heard things from other students who had too many different preceptors and you just want continuity of learning....”*

The influence of the preceptor was also illustrated earlier in relation to ‘negative experiences’, with the powerful examples of how the person in this role has the ability to make such a difference to the learning experience for some students. These findings support those already well documented in the literature. Andrews et al. (2005), Papp et al. (2003) and Stutsky and Laschinger (1995) all agree that nurses who have a preceptorship responsibility play an important role in helping the student fit into the work environment so that learning can take place. The nurse in charge also has important influence for creating and maintaining a good learning environment according to O’Flanagan (2002). However, in my study just over half (54%) of students considered this person to be important in terms of supporting their learning, and 28% indicated that

this role was least important. Interestingly, students in the group interview did not mention the nurse in charge either. It is difficult to know why this might be, apart from the potential ‘invisibility’ of this senior nurse to students. The management requirements of this role in health environments often means they have a minimal clinical presence in terms of the day-to-day ‘hands on’ care of patients. So while they may well be facilitating a positive clinical learning environment in their area, it is more likely to be at a budgetary and staffing level. Andrews et al. (2005) and Chan (2002) suggest that of more importance is that the nurse in charge creates a ward or unit culture which values education, and that supports the clinical staff to facilitate this.

The clinical lecturer was also identified as an important support person for students in the clinical area. This person is employed by the educational institution to facilitate student learning in the clinical environment and provide academic support to students and clinical staff. Students in the questionnaire ranked the clinical lecturer second in importance, after the preceptor, but the students in the group interview did not mention this role as much as their preceptor. Those who did obviously had vivid memories of their relationship, and like the preceptor, the clinical lecturer clearly has the ability to make a difference to the clinical experience for students. For example one student (J) had two quite different experiences with different clinical lecturers:

“What influenced me was my stage x clinical lecturer...absolutely brilliant...she was not afraid to share her knowledge” and

“ I thought I would fail if I didn’t do what my tutor (lecturer) wanted...and get those boxes ticked off...I backed right off then and just wanted to get out of there...”

These examples reflect quite different relationships in terms of power and the subsequent impact this had on student behaviour and learning.

The impact of specific clinical placements on student decision-making has already been discussed in relation to individual student preferences and the effect of positive and negative experiences. Further discussion about decision-making about specific areas of practice occurs under the influence of education and career planning later in this chapter.

External Influences on Students Perceptions of Nursing

White (1999) also found that students appeared to use preconceived images and expectations of nursing in their job selection, unless this was changed by a personal experience in the course. This is illustrated by student (V) from the group interview, who said:

“...I had a vision for myself then and I have come out the other end with my vision complete, which is outstanding.”

It would seem that the student's knowledge of, and preference for a particular area of nursing practice at the beginning of the programme, can have a powerful and lasting effect. Student (V) also said:

“...I had a pathway I wanted to try...theatre nursing...my second elective placement was in that role....”

The images of nursing that students' gain from their clinical experiences referred to by Brodie et al. (2004), Pye and White (1996), and Spouse (2000) were not part of the questionnaire itself, and were not referred to by the students in the group interview.

However, they may well have been unknowingly influenced by views held by wider society and the new generation 'x and y' expectations, particularly in relation to their interest in technology in nursing, and the strong interest of some students in working with children, as described by Happell (2002) and Rognstad et al. (2004). This is discussed again in relation to the influence of career planning below.

The Influence of Location and Place

The geographical location of clinical placements was considered to have some degree of influence over clinical placements decisions for 61% of students for Elective I, and just over half (53%) for Elective II. However, it had no influence at all for over a third of students. The few comments in the questionnaire seemed to be more concerned with the students' ability to travel away from their home base or not. Only one student made reference to needing to be near her family, but questions pertaining to the impact of specific family commitments were not included in the questionnaire, and therefore is a potential gap in these findings.

Many students also had a clear preference for a particular hospital or agency when it came to making their decisions. This is likely to be due to previous positive experiences in these environments. Just over seventy per cent (71%) indicated that this had a degree of influence for Elective I and fifty-two percent (52%) indicated this for Elective II. Considering that students gain valuable 'market knowledge' in their experience of different healthcare settings, the positive or negative impact of these placements could have a significant effect on future recruitment and retention of staff (O'Flanagan, 2002). Further discussion about the effect of nursing and place on each other, and the

multidimensional experiences which occur in clinical placements is described by Andrews (2002) and Andrews et al. (2005) and is included in the previous discussion about the clinical learning environment, and career planning below.

The Influence of Education and Career Planning

It was interesting that more than half the students who responded to the questionnaire had some idea about where they were interested in working as a registered nurse prior to starting the programme, with the majority wanting to work in a hospital setting, and of these most wanted to work with children and families. This supports Happell's (1999, 2002) and Rognstad et al.'s (2004) findings that working with babies and children was the first career preference of more than half their participants. Of further interest is that at this early stage, students clearly had a strong preference for hospital nursing, particularly the action-orientated, more technical specialities like emergency department and operating theatre as described by Kiger (1993), Stevens and Crouch (1998), Stevens and Dulhunty (1997), and Rognstad (2004). However, while most students were interested in working in a general hospital setting, they were some students who indicated an interest in other areas of practice like mental health, and nursing in the community. While these areas ranked consistently low in Happell's (2002) study in terms of popularity, it is a positive finding in this research that an early awareness and interest existed in these nursing specialties, which should be acknowledged and nurtured as potential clinical pathways for students in the undergraduate curriculum because of the potential impact on their future career plans. In general, the high level of interest in working in hospitals appeared to be sustained

throughout the three-year programme, remaining the popular choice for each of the final two elective placements. It must be noted, however, that the final 'Elective II' requests did reveal a slight increase in interest in other specialty areas of practice (e.g. Emergency Department), and in mental health, and community nursing. It is possible that this new trend was influenced by the lack of availability of clinical placements in medical-surgical areas due to the requirements of students in other clinical courses, but could also be due to the additional exposure to these specialty areas during the final year of the programme. In support of this view, Hafner and Proctor (1993) found that more positive attitudes were developed towards caring for the mentally ill as a result of theory teaching and practice exposure, and many other researchers support the relationship between positive clinical learning experiences and mental health career pathways (Ferguson et al, 1999; Hardyman & Robinson, 2001; Hayman-White, 2004; Hayman – White et al., 2004, Mullen et al, 2002). Rural nursing is another example where practice exposure increases the likelihood of student interest in a possible future career according to Edwards et al., (2004), Neill et al, (2002), and Smith et al., (2001), but this particular specialty area was only mentioned by one student in my study. Nevertheless, the general link between particular practice experiences and career intentions is well supported by many researchers including Calpin-Davies (2003), Chung-Heung and French (1997), Clare et al. (2003), and Talbot and Ward (2000, in Edwards et al, 2004).

Given the strong body of evidence supporting the link between clinical practice opportunities and career possibilities, it is interesting that research also exists which suggests that nursing education does not always positively influence student decisions. Stevens and Dulhunty (1997) and Happell (2002) found that exposure to less popular

areas of practice like aged care, mental health nursing and community nursing made little difference to students at the end of the programme, and that it was an interest in technology that helped students to sustain an interest in a career in medical–surgical nursing, rather than the direct influence of their nursing education (Stevens & Dulhunty, 1997). Their research findings raised questions for me about nursing education, and whether positive clinical experiences and encouraging areas of interest makes a difference, to future career plans. However, in this study there was a strong link between a positive experience and interest in an area of practice for students, and also a relationship between the influence of a positive experience and short-term career planning. These findings reinforce the importance of students selecting placements that support their practice interest, and the importance that these are positive experiences. This is also supported by students (M) and (V) from the group interview:

M: *“I chose my second elective in an area that was interesting and that I could be passionate about...a good area...which may suit my future career...”*

V: *“I chose this specialty for my elective to increase my knowledge and really enjoyed it and would like to go back to it at some stage.”*

Another influential factor with career decisions is previous personal experience as a patient, past work as a health worker, or the influence of a nursing role model by a friend or family member (Larsen et al, 2003). The same student (V) also said:

“I met someone years ago who was in that role [of operating theatre nurse] and she was passionate about what she did....”

The above quote is clearly consistent with Larsen et al’s (2003) findings.

Future career plans definitely were an influencing factor in the choice of clinical placements in the questionnaire data. The comments generally related to students wanting to see if particular areas were where they wanted to work in the future. Career planning decisions about nursing are also influenced by a student's life stage, preferred life style, income and professional development plans according to Cobden et al., (2002). They found that younger nurses are more likely to want to travel overseas, whereas midlife nurses are more influenced by the needs of their family. This is evidenced by comments in the group interview. Three of the younger students referred to working overseas in the short term; one considering "*work with the Red Cross or on 'mercy ships'*", and the other two talked "*about going overseas to travel and get overseas experience*". Whereas two mid-life students mentioned that "*money is a driver...and family needs*", and "*the need to make shift work more family friendly*".

Career planning in the short and long term was a moderate to major influencing factor in the choice of elective placement for more than two thirds of the students in this study. Awareness of employment opportunities for new graduates and availability of new graduate programmes linked to a particular clinical agency also had a degree of influence for students. These findings support those of Heslop et al. (2001) who found that final year students considered a good new graduate programme in a particular agency of interest to be an important first step in their nursing career. Nearly all (six out of the seven) students in the group interview mentioned the role of a new graduate programme in their career planning decisions. At the time of the interview all six students knew they had been offered a place on a graduate programme, and they

appeared to have given consideration as to how this would benefit them. An example of this from student (C) is:

“...chose this new grad programme because I can do one rotation through the Emergency Department after 6 months....”

And student V said

“I think a new grad programme is an important way to find your feet...as an older student people can expect too much of me in terms of skills and experience.”

The students in this study expressed a clear interest in working in a hospital setting in the first two years after graduation, the majority of whom thought this would be in a medical or surgical ward. This supports the previous findings of Happell (2002), Kiger (1993), Stevens and Crouch (1998), Stevens and Dulhunty (1997) and Rognstad et al. (2004).

In the longer term (more than two years after graduation) there was a definite interest in more students wanting to work in a community setting. There still remained a cohort who predicted they would still be working in a hospital setting, a small number in a mental health setting, and, interestingly, a small percentage interested in working in a humanitarian capacity in a third world country. Student (G's) comments are a good example of her short and long-term career plans:

“ In the short term I will be working in a hospital getting experience...I think I will always want to work in a hospital...in hospital you have more support...in the community you need the ‘tools in your tool-bag to cope...but you could change I guess...”

However, it is a concern to note that the percentage of students indicating they are requesting an elective experience in a mental health area, or planning to work in this area of practice in the short or long term, are very small. The stigma associated with mental illness and mental health nursing has not changed a lot over the years, in spite of efforts to promote this area of practice. It is hoped that the introduction of additional mental health theory and practice into the Bachelor of Nursing programme may help to address this issue at a local level.

In this study there is a definite link between 'interest in a particular area of practice' and 'career planning'. Some students are more aware than others of the specialty areas of practice within the generic career of nursing. Students who do have a prior specialty interest will benefit from being able to select clinical placements in their final year that support this. Other students tend to develop their interest as they experience different clinical settings as part of the programme requirements. All clinical experiences contribute to students' learning about the practice of nursing, but some will influence student decisions about particular areas more than others, and will even be far-reaching in their influence over future career pathways.

Student Decision-Making

Factors that influence student decision-making in relation to their final year placements have been central to this study, but it is the process of decision-making itself that will lead to a particular placement choice. From the data gathered, the students in this study appeared to manage the decision process using a combination of the rational approach described by Tiedeman and O'Hara (1963, cited in Phillips, 1997) and the alternate approaches described by Phillips. Coincidentally, this combination is very similar to the model developed by Hossler and Gallagher (1987, in Leach and Zepke, 2005), and used by Leach and Zepke in their report on decision making by tertiary students to the New Zealand government. Tiedeman and O'Hara (1963, cited in Phillips) describe stages of awareness, exploration and identification of alternatives, which are similar to the predisposition and search stage in Hossler and Gallagher's (1987, in Leach and Zepke) model. Choice and action occur next in Tiedeman and O'Hara's (1963, cited in Phillips) theory, and Hossler and Gallagher (1987, in Leach and Zepke) identify the need to make choices from what is available, giving consideration to the positives and negatives of this decision. Leach and Zepke then proceed to describe other 'themes' in their decision-making framework that students will need to consider, like the different factors that may influence the process (e.g. socio economic), the information obtained through interpersonal relationships, as well as consideration of the impact of diversity (e.g. age or culture). It is interesting that these 'themes' are similar to the 'life-space', and 'life-span' factors that Phillips suggested to be considered in her description of alternative approaches to decision-making. It seems that the combination of rational and

alternate approaches previously described, are both embedded in the framework used by Leach and Zepke.

While students in this study were only asked about the influencing factors on their decision-making, rather than specifically about the decision-making process they used, it is evident from their written and verbal feedback that they do use a combination of approaches. It is also likely that they will also use ‘shortcuts’ to determine the best alternative (Phillips, 1997), and will be affected by bias (Santrock, 2005), heuristics or framing effects (Rathus, 1999) and contextual and other factors (Amundson, 1995).

Additional Finding

In relation to the questionnaire, it was interesting to note in general that student responses to all the specific influencing factors listed were consistently stronger for Elective I choices than Elective II choices. This could be due to the anticipatory context of this second experience, as it will not occur for another three months, and therefore is not as ‘real’ or close in terms of timing or impact. Also, in an applied degree programme, perhaps it is difficult for students to predict beyond ‘what is next’, in terms of time available and manageability of workload.

This chapter has discussed the findings from the questionnaire in relation to the literature using examples from the focus group interview to illustrate the key points. The

following chapter will discuss implications for nurse education and nursing practice arising from this study and suggest recommendations for future research on this topic.

CHAPTER 6: CONCLUSION

Summary of main findings

The decisions involved in the selection of final year clinical placements are influenced by a number of factors, some pertaining to the student themselves and others which impact on them from the external environment in which they live and work. This study revealed the importance of students recognising the influence of their unique personality, values and learning styles, and how these impact on how and where they will learn about the practice of nursing.

Students are definitely suited and attracted to different areas of practice. Many are influenced by the use of technology in nursing, preferring to work in hospital rather than community settings, and care for younger rather than older clients.

Interest in an area of practice, or the need for more experience in a particular area, are also important considerations, as are previous positive experiences. Preceptors and clinical lecturers provide a key support role to students in the clinical learning environment, and can be the difference between a positive or negative experience.

Ideas conceived prior to starting their nursing education can also influence student decisions. Images of nursing obtained from the media, friends, family or personal experiences also appear to have an enduring effect.

The location and type of health care service also influences student choices, and exposure to a range of clinical experiences and settings is important. In this study,

students had a preference for working in hospital settings as new graduates, and in the community in the long-term once they felt they had sufficient inpatient experience.

They were also attracted to particular hospitals or agencies due to their reputation as being supportive of students and the availability of new graduate programmes.

Implications and Recommendations

Implications and recommendations for nursing education

Educating and supporting students to be active in their selection of clinical placements is an effective educational strategy, and the current processes available to students in this study are a good example of this. However, improvements could be made in relation to encouraging students into areas of practice that are less popular, like aged care, mental health and community nursing. Lecturers, clinicians and other students could be involved in promoting the positive learning experiences and career opportunities in these areas.

Nursing education also needs to ensure that the clinical curriculum reflects an even exposure to a range of practice areas, and teaching methods should not be biased towards medical-surgical nursing. Practice areas should not devalue each other, and students should be encouraged to see the uniqueness of different areas of practice.

Many students are aware of the ability to have an informal 'clinical stream' throughout the three-year programme, if they identify a particular area of interest at an early stage. However I believe this option needs to be more overt, and lecturers and

clinicians could also be involved in mentoring students to encourage and support specific practice interests. Examples of this could be mental health, or rural nursing pathways.

Students may also need assistance and guidance with the decision-making process itself, as it can not be assumed that they are aware of the rational and alternative approaches and understand the impact of bias and heuristics. It would be useful for lecturers to provide an overview of different strategies they could use to make the best decisions about clinical experiences.

Existing clinical placements could be reviewed in terms of the experience offered, and consideration given to their wider learning potential. For example students could get valuable surgical, medical and mental health nursing experience in many ‘community’ placements, as opposed to these only being obtained in hospital settings. Alternatively students could have a mix of both inpatient and outpatient nursing experiences to meet their specific learning outcomes. Creativity, consultation and collaboration between education and practice are essential for these ideas to work.

Consideration also needs to be given to the nursing programme itself and the effect it has on students. The philosophy underpinning the curriculum, the teaching methodology, and the personalities and clinical interests of lecturers could all have an influence on students, depending on the students’ age and life stage. Some will mature students seeking second careers or new opportunities in mid-life. Students in this life-stage often have family commitments to consider, so flexible learning options will enable these students to learn when it suits them best. Other students will be younger, in the ‘generation x and y’ categories, who are seeking an education that will lead to a

successful career. They are more likely to be interested in outcomes, and may become frustrated with the processes required to achieve these. Development of on-line learning resources, simulated clinical practice scenarios, and offering alternative teaching delivery via mobile phones, computers and other technology, are some strategies to engage the different student groups of the future. Academic staff must accept the challenge to create a stimulating and dynamic learning environment to ensure nursing remains an attractive career option.

Implications and recommendations for nursing practice

This study has confirmed again that the clinical learning environment has a major influence on student learning. Nurses who are assigned as student preceptors need to be prepared and supported in their teaching role, and nurse managers need to factor teaching and learning into their clinical budgets. It is important that the whole nursing team takes responsibility for educating the nurses of the future by providing a positive learning milieu.

Students from generation 'x and y' do not want to be 'workaholics' or 'martyrs' to their chosen profession. They will be looking for flexible working hours and shifts that allow for a work-life balance. Nurse managers will need to consider how they roster staff to provide the nursing care needed with the right skill mix. Nurses in the future may prefer to work longer shifts over fewer days each week, in order to meet their own needs, and the needs of the health facility. If we are to address the ageing nurse workforce, nurses in education and practice will need to work together to make nursing an attractive

long-term career for younger graduates. However, an alternative strategy may be to target the recruitment of more 'mature' students (e.g. 30 years plus) into nursing. As well as their range of life experiences, this group are also more likely to be settled in their life-stage, with many having responsibility for immediate or extended family members. Although they would not provide a chronologically young group of health workers, they would provide a dependable and stable long-term workforce.

Recommendations for future research

While this study has explored and identified the factors that influence student decisions about clinical placements, it would also be useful to consider the influence of age, gender and family responsibilities more specifically, to identify the differences, if any, that variations in these would have on this process.

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Appendix A

Appendix A consists of:

- information sheet for students re questionnaire
 - questionnaire (Part A)
 - questionnaire (Part B)
- 

Information re Questionnaire for BN Year Three nursing students

Please read the following note before completing the attached questionnaire.

You are invited to participate in the research project 'Decisions, decisions: How nursing students select final year clinical placements' by completing the following questionnaire. The aim of the project is to explore the influences on student decision making in relation to clinical placement choices in their final year of the Bachelor of Nursing programme.

The project is being carried out as part of a final dissertation for the Masters in Education course by Rose Whittle under the supervision of Diane Pearce (Supervisor). Diane can be contacted at the University of Canterbury, Department of Education phone 364 2987 ext 4805 if you wish to discuss any concerns you may have about participation in the project. Rose can also be contacted at work on phone 940 8292, if required.

Ethical approval for this research project has been obtained from the Ethics Committee at CPIT.

The questionnaire is anonymous, and you will not be traceable as a participant as no identifying characteristics will be used on the questionnaire. An independent nursing lecturer will distribute and collect the questionnaires from you and forward to the researcher Rose Whittle. All returned questionnaires will be kept in a locked filing cabinet, and the data will only be available to the researcher and her supervisor.

By completing the questionnaire it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project with the understanding that anonymity will be preserved.

Please return the questionnaire to the nursing lecturer who has distributed it to you today.

The time you give to answering this questionnaire is appreciated and it is hoped that the findings will benefit future Bachelor of Nursing students.

Students who complete the questionnaire are also invited to indicate if they would be prepared to participate in a follow-up group interview facilitated by the researcher Rose, if required. You will be given a further information sheet and a consent form to sign should this need to occur.

If you would like a copy of the final research findings, please email the researcher Rose Whittle whittler@cpit.ac.nz after your questionnaire has been returned.

This questionnaire has two parts:

Part A – focuses on your anticipatory decision making regarding elective placements and factors which influence this. This part will be given to you today.

Part B – will focus retrospectively on your decision making. This will be given to you following your first elective placement.

Questionnaire related to BN Year Three Clinical Elective Placements

Part A - This survey contains questions related to areas of nursing practice that interest you. Please take time to consider the factors that influence your decision making regarding your elective placements. Your responses to the following questions will be most useful when planning the clinical curriculum for future students.

1 Before you started the Bachelor of Nursing programme did you already have an idea about the area of practice you would be interested in working in as a Registered Nurse?

☐ Yes ☐ No ☐ Not Sure (please tick best response)

If yes, please state area of practice _____

2 What general area of practice have you chosen for your first elective? (Elective I)
(Please tick the appropriate boxes below.)

Elective I (actual)

- ☐ Medical
- ☐ Surgical
- ☐ Mental Health
- ☐ Community Health (e.g., Practice Nursing)
- ☐ Child & Family Health (e.g. Paediatrics)
- ☐ Continuing Care (e.g., Resthomes, Older Persons Hospitals)
- ☐ Rehabilitation (e.g., Brain Injury, Older Persons Rehab)
- ☐ Intellectual/Developmental Disability
- ☐ Other _____

Comment: _____

3 What general area of practice do you anticipate choosing for you second elective? (Elective II)

Elective II (anticipated)

- ☐ Medical
- ☐ Surgical
- ☐ Mental Health
- ☐ Community Health (e.g., Practice Nursing)
- ☐ Child & Family Health (e.g., Paediatrics)
- ☐ Continuing Care (e.g., Resthomes, Older Persons Hospitals)
- ☐ Rehabilitation
- ☐ Intellectual/Developmental Disability
- ☐ Other _____

Comment: _____

4 Now you have completed your 'directed' clinical experiences as required by the New Zealand Nursing Council, please describe what has influenced your choice of elective placements?

5 How much have the following factors influenced your placement choices for Elective I and Elective II?

(Please circle the level of influence of each of the following factors for Elective I and Elective II using the scale below. Also add additional comments if you wish.)

5	4	3	2	1
Major influence	Moderate influence	Minor influence	No influence	Not applicable

**a. Interest in a particular area of practice
(e.g., mental health, child health, surgical nursing)**

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

**b. New interest stimulated by previous Stage 5 experiences
(e.g., Practice Nursing)**

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

**c. Likelihood of an elective placement being available in a specific area
(e.g., District Nursing)**

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

d. Specific short term career plans (up to 2 years)

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

e. Long term career plans (after 2 years)

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

f. Previous positive clinical experiences

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

g. Previous negative clinical experiences

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

h. Need more experience in a particular area

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

i. Feedback about a specific placement from other students

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

j. Reputation of clinical area as a positive student placement

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

k. Prerequisites imposed by clinical area (e.g. surgical ward experience prior to Operating Theatre)

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

I. Awareness of employment opportunities for new graduates

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

m. Availability of new graduate programmes linked to particular clinical agency

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

n. Preference for a particular hospital or clinical agency

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

o. Geographical location

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment: _____

p. Other – please identify _____

Elective I					Elective II				
5	4	3	2	1	5	4	3	2	1

Comment _____

6 Please add on further comments about why you have chosen your particular elective placements, if you wish.

7 At this point in time what is your preferred area of practice as a Registered Nurse?

Short term (up to 2 years) _____

Long term (after 2 years) _____

Thank you for taking the time to complete this questionnaire
Rose Whittle

Part B – This part of the survey is a retrospective look at the decisions you made in relation to your first elective (Elective I). This information will be helpful for clinical planning for future students.

1 Now that you have completed your first elective placement (Elective I) can you recall what your expectations of this clinical experience were? (If yes - please describe briefly).

2 Did Elective I meet your expectations?

Yes, because

No, because

3 Is there anything that would have been useful to know before starting Elective I that would have enabled you to meet your learning needs more effectively?

4 Whose support was the most important to you in this first elective placement?

(Please rank the importance of this support by using the scale below. You may use the same rank more than once.)

5	4	3	2	1
Most Important	Important	Least important	Not important	Not applicable

- ☐ Unit Manager/Clinical Charge Nurse
- ☐ Nurse Educator (from clinical area)
- ☐ Nurse Preceptor
- ☐ Clinical Lecturer (from CPIT)
- ☐ Other nursing student(s)
- ☐ Other (please state)

Once again, thank you for taking the time to complete this questionnaire.
Rose Whittle

✂ ----- ✂

Please detach and submit separately in order to maintain your anonymity in relation to the above responses.

Followup Group Interview

Please indicate if you would be happy to be contacted to participate in a small group interview with other students to elaborate further on some of the above items if required by the researcher.

Yes: I would be happy to be contacted by the researcher Rose Whittle as part of a group interview

Name:

Email address:

Phone number:

Appendix B

Appendix B consists of:

- letter to students re focus group interview
- information sheet for students re focus group interview
- consent form for students to sign for focus group interview
- focus group questions

Dear

Thank you for agreeing to still be part of a small group interview to assist me with my university research. Please see below for the arrangements.

Date: Tuesday 7 November

Time: 1230 – 1330hrs (After your group photo. Lunch will be provided!)

Room: N611

I have enclosed an Information Sheet and Consent Form for you to read and sign in anticipation.

I look forward to talking with you on this day.

Rose Whittle



Information Sheet for Group Interview

Information Sheet (copy to be retained by participant)

Name of Project: **Decisions, decisions: How nursing students select final year clinical placements**

Name of Researcher : Rose Whittle

Contact: C/- School of Nursing, CPIT Ph 940 8292 or 027 428 9229

Information

I am currently completing my Masters in Education degree at the University of Canterbury and the above research project is my dissertation topic.

I invite you to participate in a group interview to investigate more fully some of the responses from issues explored in the questionnaire previously distributed.

The purpose of the project is look at the influences on nursing student decision making in relation to clinical placement choices in their final year of the Bachelor of Nursing programme.

It is anticipated that the interview will involve approximately one hour of your time in which questions will be posed to the group. These will hopefully provide more information related to aspects of the questionnaire in which I require clarification. The interview will be audio taped with the groups' permission so that I can concentrate on what is being said. As the researcher I will listen to the audiotape and transcribe only those responses which relate to the specific questions asked in the interview. It is anticipated that this information will help to 'fill the gaps' in the data gathered in the questionnaire.

I have also enlisted the assistance of an academic colleague (Elizabeth Hanley) who will primarily play a support role, helping me keep the group focused on the topic, and ensuring that all participants have an opportunity to contribute.

The results of this project will be published as a final dissertation. To ensure anonymity and confidentiality no names will be used in the transcription process and the identity of participants will be protected by myself and my colleague Elizabeth. You may withdraw from the project or decline to answer any questions.

No anticipated risks are envisaged for those involved in this interview process.

I will be pleased to discuss any concerns you have about participation in the project.

My university supervisor is Diane Pearce who can be contacted in the School of Education at the University of Canterbury., phone 364 2987 ext 4805.

The project has been approved by the Christchurch Polytechnic Academic Research Committee and University of Canterbury Human Ethics Committee.

Consent Form

Name of Project: **Decisions, decisions: How nursing students select final year clinical placements**

Name of Researcher : Rose Whittle

Contact: C/- School of Nursing, CPIT Ph 940 8292 or 027 428 9229

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I have the right to ask further questions at any time.

I understand I have the right to withdraw from the study at any time and to decline to answer particular questions.

I agree to provide information to the researcher on the understanding that my name will not be used without my permission.

This information will be used only for this research and publications arising from the research project.

I agree/do not agree to the interview being audiotaped.

I also understand that I have the right to ask for the audiotape to be turned off at any time during the interview.

I am happy for another academic staff member (Elizabeth Hanley) to be present in a support role for the researcher.

Signed.....

Name

Date

EDUC 695 Focus Group Questions 7/11/06

Analysis of the 2006 questionnaire data has revealed the following questions:

Clinical Experiences

1. The data has revealed that positive clinical experiences have a moderate to major influence on preferred areas of practice in the future.

What do you think of this finding?

2. Interestingly the data also revealed that students ranked negative clinical experiences as having no or minimal influence. The few comments indicated that the students could see beyond the negative issues in terms of learning. These issues did not seem to have a negative influence on the students perception of the particular area of practice either.

What do you think about this?

Do you think negative experiences are common?

And if so, do they impact on elective choices, future career ideas, and preferred areas of practice?

CAREER PLANNING

1. Students who had a strong interest in an area of nursing practice prior to starting the BN appeared to follow-through with this in their choice of clinical placements and predicted career intentions.

Does this apply to anyone here today?

If so, it would be great if you could elaborate on this.

2. The majority of students predicted that their preferred areas of practice as an RN were in a general hospital setting (e.g. med/surg) in the short term (up to 2 years) and in the community long-term (after years).

Would you agree with this and why?

3. Tell me about your personal career planning as a BN student.

How, what, when and who have you accessed for help or career advice?

Appendix C

Appendix C consists of:

- An audit trail describing the steps taken to collect and analyse the questionnaire data.

APPENDIX C

Audit Trail

The following account is a description of the steps taken to collect and analyse the data in this study, and how irregularities were managed in the student responses.

Questionnaire

Response rate

Part A was completed by 64 students who were present on the day that the course leader administered the questionnaire for me. This was out of a possible total of 69 students in this particular final year group. Part B was completed by only 54 students six weeks later. Again this was out of a possible total of 69 students.

Comments on Data Collection

The questionnaire data was collated using the following strategy. Separate spreadsheets were created for Part A and Part B. For Part A, two spreadsheets were used, one for primarily numerical data, and the other for text data. This was so that the numerical data could be counted more easily, and the number of responses converted to percentages. The text data was recorded separately so that common responses and themes could also be more easily identified. On the numerical data sheet, the first column was numbered 1 – 64 so that each of the student's responses could be recorded across the spreadsheet in the column or columns created for that particular question. For example, Question 1 required a yes or no answer. If yes, a short text entry was also required giving the area of practice that students were interested in. Questions 2 and 3 related to areas of practice chosen for their elective placements. For these questions, separate columns were allocated for each of the eight clinical areas given (e.g. Medical, Surgical, etc), plus an additional column called 'other' for any area not already included. If a student had

ticked more than one answer, I looked at the name of the clinical area given and made a decision regarding the primary focus of clinical practice based on my professional judgement. For example, the Neonatal Intensive Care Unit (NICU) is primarily an area of medical nursing practice, as opposed to surgical nursing. Optional comments were collated on the separate spreadsheet created for text data under the specific question number. Questions 5a – 5p required the students to rate the level of influence of each factor on a five point scale, for both Elective I and Elective II. These responses were transferred to the numerical data spreadsheet, and again any optional comments were transferred to the text data spreadsheet. Students who failed to rate a particular factor had this recorded as a ‘Nil’ response to keep these separate from the ranking ‘Not Applicable’. Questions 6 and 7 both had text responses and again these were recorded on the text data spreadsheet.

Data for Part B was collated similarly to Part A. Questions 1, 2 and 3 each had short text responses which were transferred to a separate Part B text data spreadsheet. Question 4 required students to rank the importance of support from different nursing staff and these figures were transferred to the Part B numerical spreadsheet. Again nil responses were recorded as such.

Comments on Data Analysis

I was unable to link individual student responses between Parts A and B due to lack of student identifiers, as per the original agreement to maintain confidentiality and anonymity. Thus comparisons were only able to be made between ‘Parts’ of the questionnaire rather than with specific students.

Student’s responses which did not ‘fit’ the question, were not included in the analysis. This was very rare. However one example is from Part B, Question 1: “Now that you have completed can you recall what your expectations of this clinical experience were?” Student (# 39) responded: “That patients continuously going into cardiac arrest.” This student response indicated to me that

there was possible confusion or lack of understanding of what the question was asking, unless s/he genuinely expected the patients in the particular clinical area to be having frequent and ongoing cardiac crises.

The scores on the rating scales were able to be married up with the students' comments to ensure they were congruent. When congruency was not present I made the assumption that the student must have misinterpreted the question, and thus left out this particular response. An example of this is also from Part B, in Question 5: "Whose support was most important to you in this first elective placement?" This particular student (#43) ranked the support of his/her preceptor as 'Not applicable'. Yet in his/her response to Question 2: "Did Elective I meet your expectations?", the same student wrote: "I got to work mostly with one buddy (preceptor) which allowed her to get to know me and give me freedom to work more independently and become more confident and competent". Due to the lack of congruency between these two responses, they were omitted from the final analysis.

A detailed description of the data analysis process can be found in the Methodology chapter, and the results in the Findings chapter.